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ABSTRACT

This document is intended to give business teachers a few best practice ideas. Section 1 presents an overview of best practice and a chart detailing the instructional levels, curricular areas, and main competencies addressed in the 26 papers in Section 2. The titles and authors of the papers included in Section 2 are as follows: "A Software Tool to Generate Realistic Business Data for Teaching" (Catherine S. Chen); "Alternatives to Traditional Assessment of Student Learning" (Nancy Csapo); "Applying the Principles of Developmental Learning to Accounting Instruction" (Burt Kaliski); "Collaborative Teamwork in the Classroom" (Shelia Tucker); "Communicating Statistics Measures of Central Tendency" (Carol Blaszczynski); "Creating a Global Business Plan for Exporting" (Les Dlabay); "Creating a Supportive Learning Environment" (Rose Chinn); "Developing Job Survival Skills" (R. Neil Dortch); "Engaging Students in Personal Finance and Career Awareness Instruction: 'Welcome to the Real World!'" (Thomas Haynes); "Enticing Students to Prepare for and to Stay 'Engaged' during Class Presentations/Discussions" (Zane K. Quible); "Group Project on Creating E-Commerce Site" (Diane C. Davis, Martin Hebel); "Identifying Global Business Opportunities" (Les Dlabay); "Looking beyond the First Job or Career" (Jean Mausehund); "Making a Group Work Project a Successful Experience" (Marilyn R. Chalupa); "Making Keyboarding Fun" (J. Rebecca Holcomb); "Making Students Responsible for Learning" (Dianna Briggs); "Multiple Intelligences: Classroom Strategies" (Thelma King); "Proactive Strategies for the 21st Century: Incorporating Technology in the Classroom" (Shelia Tucker); "Project Based Learning" (Johnny Sue Bauer); "Student Passages: Moving from Ineffective Groups to High Performance Teams" (Annette C. Easton, Marie E. Flatley); "Students Demonstrate English and Keyboarding Skills" (Gail Garton); "Students Demonstrate Computer Skills" (Heidi Perreault); "Teaching Problem Solving in Computer Applications Courses" (Charles M. Ray); "Teams: A Colorful Match" (Melinda McCannon, Tena B. Crews); "Using Assignment Sheets to Keep Students Busy" (Kathy

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Burchfield); and "Using Intranets for Teamwork" (Marie E. Flatley, Annette C. Easton). (MN)

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BEST PRACTICES IN BUSINESS INSTRUCTION

Coordinated by

Dianna Briggs
University of Northern Iowa
Cedar Rapids, Iowa

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Best Practices in Business Instruction

Coordinated by

Dianna Briggs

University of Northern Iowa
Cedar Rapids, Iowa

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Preface

This publication was created to provide business teachers with a few best practice ideas. To do this, Delta Pi Epsilon solicited authors asking them to submit their best practice ideas. By definition, best practice ideas are those ideas or procedures that have proven to be successful. The authors of the best practice ideas provided here have shared an idea or practice that has proven to be successful for them in their classrooms.

All submitted ideas were distributed among a committee of readers for a blind review. Approved articles were then edited as needed and submitted for publication. The practices included suggestions for methodology in many different areas of the business curriculum. Many of the submissions included here are applicable to multiple curricular areas, both secondary and post secondary.

Section One provides an overview of the concept of best practice and a chart to guide readers to the appropriate level (secondary or post secondary) as well as the curricular area and main competencies addressed in each submission.

Section Two contains the best practice ideas in alphabetical order by title. Each submission is organized in an action research format describing the area needing improvement, the suggested idea, the procedures used, the results, and suggestions for implementation. This is followed by the resources consulted or used.

Readers have permission to reproduce and adapt each best practice idea for their own instructional use.

Additional acknowledgments include:

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SECTION ONE

Best Practice

In all walks of life, individuals find something that works well for them in their profession and then continue to refine that practice to improve their efforts. This activity will have an impact on how they perform their job. It is when these individuals share their ideas, procedures, or efforts with others in their profession that they have an impact on their profession. In education, all teachers can serve as mentors to one another by sharing ideas and practices that work for them in their own classroom.

Sharing of best practice ideas and mentoring are ways teachers can help one another to learn from the research and experimentation of others. "Teacher researchers search for what is behind their success" (Hansen, 1997). "We need to examine those parts of our teaching that have worked well with our students and be willing to share those experiences with other educators" (Bardine, 1997).

Although the curriculum may be prescribed for some teachers, the methodology is up to the individual teachers. "Teachers as practitioners act as researchers as they build theory concerning the specifics of their circumstances through reflection, inquiry, and action" (Anderson, 1999). After observing their own performance or that of their students, teachers are able to determine the best procedure for an activity or class situation.

Best practices have developed from a formal or informal testing of an idea. It usually begins because a teacher has a question or suggestion for improving the quality of their classroom procedures. It can be as simple as "How can I do this better?" or as complicated as "What would be the statistical improvement of student grades if 'XYZ' is implemented?" Many people shy away from things labeled "research" because it often means a formal process requiring a considerable amount of time, reading, and statistical reporting. Frequently, the results are reported in technical language that is difficult to understand or doesn't transfer easily to classroom practitioners.

What teachers may not realize is that they are conducting research in their own classroom when they attempt something new in response to a problem or concern they have encountered. They recognize a situation that needs improvement. Through reading, discussions, or personal brainstorming, they develop an idea that may improve or correct the situation. A decision is made as to how to implement the new idea, and it is carried through. Either the new idea works to some degree, or it does not. Either way, the teacher has conducted a simplistic form of research. It is up to the teacher at that point to determine whether to refine the practice or to start a new idea. If the idea works very well, the teacher will repeat the performance to refine and perfect the details. Ideally, before beginning any new practice, the teacher will review current publications for a baseline of information. This would enhance their own learning and decision making in the process.

Some key elements of this type of research which becomes best practice include: instructional approach, systematic approach, and follow up. This means that the instructor has a hands-on or a minds-on approach that includes investigation, discovery, and/or application. The idea will include opportunities to practice the new behaviors or strategies. The suggested idea needs to align with curricular and instructional needs. The follow up takes a variety of forms and should use the new knowledge and skills in the classroom (Rusko and Luczak, 1995).

Most teachers want ideas that they can use in their classroom with relative ease of implementation. It is when this research is shared in language that is understood by practitioners that it becomes applicable. Taylor

(1999) recently stated, "We want to promote the attitude that most education research should have practical applications." The best practice ideas provided in this publication are presented in a practical and easy-to-use format. They reflect instructional practices and/or student experiences that are consistently productive.

References

Anderson, M. (1999). Effective practice evolves from meaningful research. Winter, 2000. *The Delta Pi Epsilon Journal, XXXXII*(1).

Bardine, B. (1997). Research to practice: Teacher research: Getting started. Kent, OH: The Ohio Literacy Resource Center. Retrieved from the World Wide Web: *http://literacy.kent.edu/Oasis/Pubs/0200-20.html*

Hansen, Jane. (1997). Researchers in our own classrooms: What propels teacher researchers? In D. Leu, C. Kinzer, & K. Hinchman (Eds.), *Literacies for the 21st century: Research and practice* (pp. 1-14). Chicago: National Reading Conference.

Rusko, Joan & John Luczak, (1995, November). SRI International. Best Practice in Action, A Descriptive Analysis of Exemplary Teacher Enhancement Institutes in Science and Technology. NSF Program Contract #9255370.

Taylor, B. O. (1999, March). Impacting practitioners with enhanced research. Research Bulletin No. 23. In NN&Q: Newsletter of Phi Delta Kappa International, 43(3), 15-18.

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The following chart is designed to assist readers in determining where they might use the suggested practice in their own curricula. The following abbreviations and competencies are used in the chart:

Subject Area Abbreviations (Subject areas are those identified in the NBEA National Standards)

AC	=	Accounting
BL	=	Business Law
CD	=	Career Development
BC	=	Communications
CP	=	Computation
EC	=	Economics and Personal Finance
EN	=	Entrepreneurship
IN	=	International Business
IS	=	Information Systems
MG	=	Management
MK	=	Marketing

Levels

S	=	Secondary
PS	=	Post Secondary

Competencies Identified

Career Development
Composing
Computation Skills
Computer Skills
Creativity
Developmental Learning
Following Directions
Keyboarding
Learning Styles
Listening Skills
Motivation
Oral Communication
Prioritizing
Problem Solving
Self Assessment
Software Applications
Using Project-Oriented Approach
Teamwork Skills/Collaboration
Technology Skills
Thinking Skills
Written Communication

Article	Author(s)	Subject Area(s)	Grade Level	Main Competencies
Software Tool to Generate Realistic Business Data for Teaching	Catherine Chen	IS	S PS	Problem solving, Software applications
Alternatives to Traditional Assessment of Student Learning	Nancy Caspo	Any	S PS	Problem solving, Using project-oriented approach
Applying the Principles of Developmental Learning to Accounting Instruction	Burt Kaliski	AC/All	S PS	Developmental learning
Collaborative Teamwork in the Classroom	Sheila Tucker	Any	S PS	Teamwork, Collaboration
Communicating Statistics—Measures of Central Tendency	Carol Blaszczynski	IS/AC/ EC	S PS	Critical thinking, Problem solving, Communication, Computation
Creating a Global Business Plan for Exporting	Les Dlabay	IN/EC	S PS	Teamwork, Problem solving, Commnication, Thinking skills, Composing
Creating a Supportive Learning Environment	Rose Chinn	Any	S	Motivation
Developing Job Survival Skills	R. Neil Dortch	BC/CD/ MG	S PS	Critical thinking, Communication, Career development, Problem solving
Engaging Students in Personal Finance and Career Awareness Instruction: Welcome to the Real World	Thomas Haynes	EC/CD	S	Career development, Communication, Problemsolving, Software application
Enticing Students to Prepare for and to Stay Engaged During Class	Zane Quible	Any	S PS	Listening skills, Prioritizing,Problem solving
Group Project on Creating an E-Commerce Site	Diane Davis/Martin Hebel	EC/IS	S PS	Teamwork, Software applications, (Includes web design and e-commerce)
Identifying Global Business Opportunities	Les Dlabay	IN/EC	S PS	Problem solving, Communication, Software applications, (Multi-cultural awareness)
Looking Beyond the First Job or Career	Jean Mausehund	CD/BC	S PS	Self-assessment, Career development, Communication, Problem solving

continued

Article	Author(s)	Subject Area(s)	Grade Level	Main Competencies
Making a Group Work Project a Successful Experience	Marilyn Chalupa	Any	S PS	Teamwork
Making Keyboarding Fun	J. Rebecca Holcomb	IS	S	Written communication, Composing, Keyboarding,Creativity
Making Students Responsible for Learning	Dianna Briggs	Any	S PS	Learning styles, Problem solving, Prioritizing
Multiple Intelligences: Classroom Strategies	Thelma King	Any	S PS	Creativity, Learning styles, Problem solving, Thinking skills
Proactive Strategies for the 21st Century: Incorporating Technology in the Classroom	Sheila Tucker	Any	S PS	Technology skills
Project Based Learning	Johnny Sue Bauer	IS	S PS	Problem solving, Project approach, Software applications, Creativity
Student Passages: Moving from Ineffective Groups to High Performance Teams	Annette Easton/Marie Flatley	Any	S PS	Teamwork skills,Problem solving, Collaboration
Students Demonstrate Computer Skills	Heidi Perreault	IS	S PS	Problem solving, Computer skills
Students Demonstrate English and Keyboarding Skills	Gail Garton	IS	S	Written communication, Keyboarding, Thinking skills
Teaching Problem-Solving in Computer Applications Courses	Charles Ray	IS	S PS	Problem solving, Critical thinking, Software skills
Teams: A Colorful Match	Melinda McCannon/Tena Crews	Any	S PS	Cooperation, Team building, Learning styles
Using Assignment Sheets to Keep Students Progressing	Kathy Burchfield	IS	S	Following directions, Software applications
Using Intranets for Teamwork	Marie Flatley/Annette Easton	Any	S PS	Teamwork, Software applications

SECTION TWO

Best Practice Articles

Article Title	Author
A Software Tool to Generate Realistic Business Data for Teaching	Catherine Chen
Alternatives to Traditional Assessment of Student Learning	Nancy Csapo
Applying the Principles of Developmental Learning to Accounting Instruction	Burt Kaliski
Collaborative Teamwork in the Classroom	Sheila Tucker
Communicating Statistics—Measures of Central Tendency	Carol Blaszczynski
Creating a Global Business Plan for Exporting	Les Dlabay
Creating a Supportive Learning Environment	Rose Chinn
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Enticing Students to Prepare for and to Stay Engaged During Class Presentations/Discussions	Zane Quible
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Teaching Problem-Solving in Computer Applications Courses	Charles M. Ray
Teams: A Colorful Match	Melinda McCannon and Tena Crews
Using Assignment Sheets to Keep Students Progressing	Kathy Burchfield
Using Intranets for Teamwork	Marie Flatley and Annette Eaton

A Software Tool to Generate Realistic Business Data for Teaching

By Catherine S. Chen

Area Needing Improvement

Teachers usually do not have access to real business database files. The database files provided by textbook publishers are usually very small and oversimplified. Without realistic database files for teacher demonstrations and learning activities, it is difficult for students to understand the complexity and scope of using database applications in the business environment. It also would be difficult for students to fully realize the capability and functionality of database applications; in turn, students may not be able to use database applications as tools to manipulate business data to solve business problems upon graduation.

It is very time consuming for teachers to create database files that resemble the size and structure of a real business database. For teachers to teach database applications effectively, they need tools that can assist in generating realistic business database files automatically.

Suggested Idea

This paper presents a software application (Business Data Generator) to assist teachers in generating realistic business database files instantly for teaching and learning. By specifying various parameters, teachers can generate Microsoft Access database files in various sizes. Smaller database files can be used for beginning database courses and larger, more complex database files can be used in advanced database courses. In addition, the Business Data Generator allows teachers to manipulate parameters and "shape" the data in certain ways to create "problem situations" for problem-solving activities.

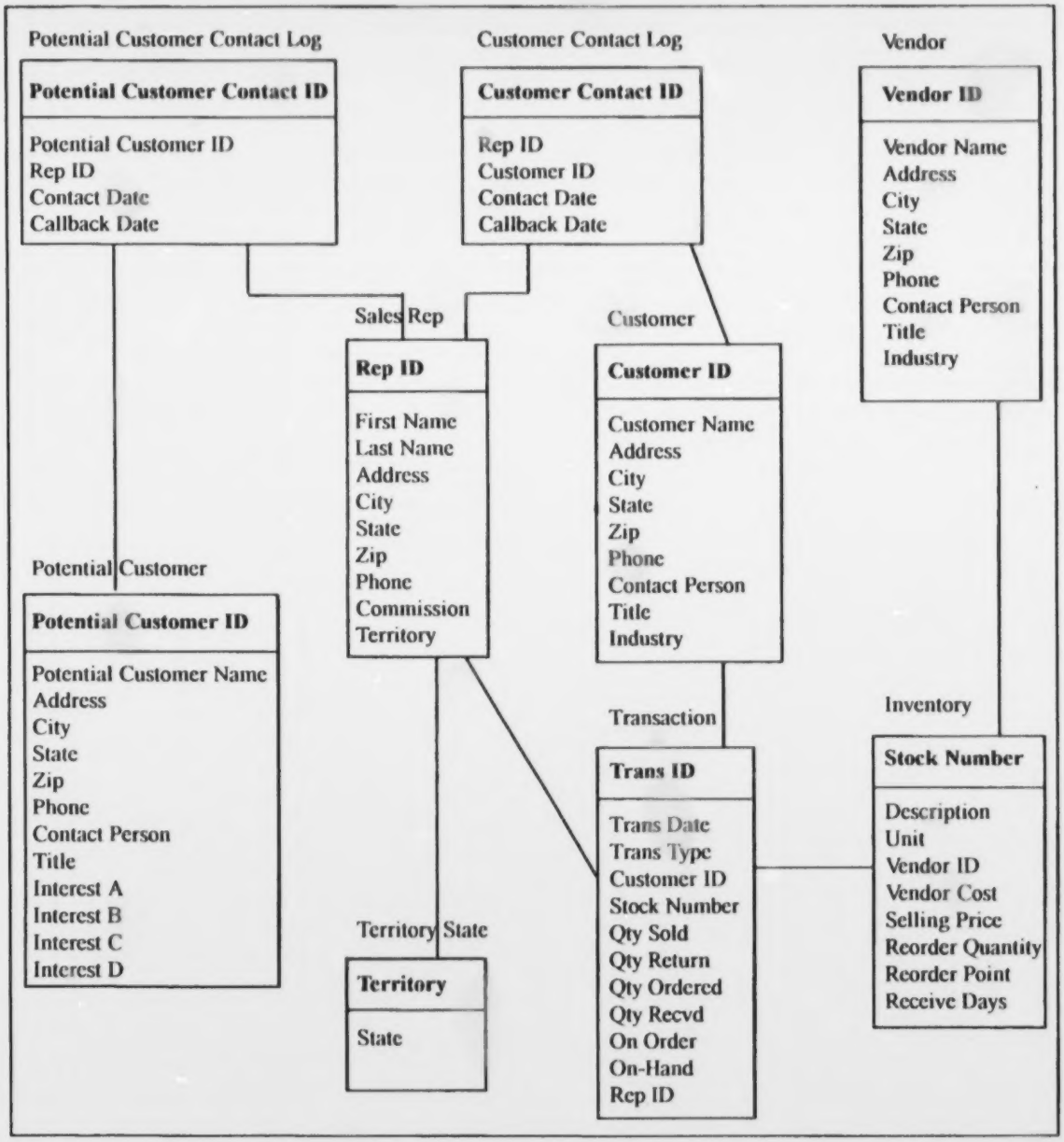
This Business Data Generator has built-in features that allow students working with advanced inventory control to experiment and analyze the effects of using various reordering points and quantities.

Instructors who are interested in using the Business Data Generator to produce database files for teaching/learning activities may e-mail cchen@bsu edu for a free copy of the software and user manual.

Procedures

Business Data Generator Algorithm. Based on the database design theory presented in *Designing Quality Databases with IDEF1X Information Models* (Bruce, 1992), a database model was developed for generating business data (page 2). This application generates realistic business data for a computer product related retailer. In addition, general business principles were built into this data generator to generate realistic business data. For example, the transaction table contains a large number of records, which include customers who purchase high quantities of lower price items per order; customers who do not order the same products more than once on the same day; customers who order more expensive items that take more days for the vendor to deliver, etc.

Database Model



Data structure. The Business Data Generator software contains an Access database file named Bits & Bytes. This Bits & Bytes database file has the template and other data needed to generate business data for teachers. As a template, the Bits & Bytes database file contains data in four of the nine tables illustrated in the database model. These four tables include the following:

- The Inventory table has 312 computer-related inventory items. This table contains 1999 pricing information obtained from an office supply catalog.
- The Sales Rep table has 6 records about sales representatives.

- The Territory State table consists of 47 states and the District of Columbia (DC). The generator draws customers and potential customers from a Company table. The table contains no records for AK, HI, and WY. Each of the 47 states and the District of Columbia is assigned to a sales representative.
- The Vendor table has 29 vendor records. Currently, these vendors are computer product related companies.

There are no records in the Customer, Potential Customer, Customer Contact Log, Potential Customer Contact Log, or Transaction tables. Data for these tables are generated according to the teacher's specifications. For generating records in these tables, the Bits & Bytes database file also contains the following information:

- The Company table consists of 2,531 company names. This is the list that the application will randomly draw upon to generate customers and potential customers.
- The Inventory Matrix table consists of predefined parameters that the application uses to generate transaction records. Items in the Inventory table are categorized into 7 groups based on their prices: $1-50, $51-100, $101-1000, $1001-2000, $2001-3000, $3001-4000, $4001-5000. The inventory items in the lower price range groups will have higher vendor costs (i.e. lower profits), higher quantities sold in a transaction, higher reordering quantities, and lower reordering points because of fewer receiving days. These parameters are based on the assumption that, because of their lower prices, it is more likely that customers will buy more at one time; and, therefore, the retail company needs to reorder them in higher quantities. It also takes fewer days for vendors to deliver these items because the vendors would more likely have them in stock.
- The Data Param table stores the defaults that the application uses. For example, the starting date and ending date of the transaction table, the maximum and minimum numbers of records per day, etc., are stored in this table.
- The Holiday table consists of holidays from 1996 to 2006; these holidays are downloaded from Microsoft Outlook. No transactions will be generated on these holidays.
- The Industry table has 197 industries. Currently, these are not used in generating data. The plan is that in later versions of this generator, teachers will be able to select an industry and generate data based on that industry.
- The Interest table consists of 48 items, which are used to generate items that potential customers are interested in purchasing but the retailer is not currently carrying.
- The Receive Transaction table has no records. This table is used during the process of generating data.

Data generation algorithm. When generating data, the Customer and Potential Customer tables need to be generated before generating other tables. Because the application randomly draws records from the Company table in Bits & Bytes, the total records in the Customer and Potential Customer tables should not exceed the number of records that the Company table contains (2,531 records). The lists of customers and potential customers will be mutually exclusive (no customers will be in the potential customer table and vice versa).

After Customer and Potential Customer tables are generated, the teacher can generate Transaction, Customer Contact Log, and Potential Customer Log tables in any order. The Transaction table will have 3 types of transaction records: Sales, Purchase, and Receive. The teacher can specify the time period (starting date and ending date) and the maximum and minimum number of transactions per day. The application will start with the first day of the time period specified and randomly pick the number of transactions for the day according to the maximum and minimum numbers of transactions per day specified, and then it will generate a Sales record by:

1. Randomly selecting a customer from the Customer table,

2. Randomly selecting an item from the Inventory table,

3. Randomly generating the Quantity Sold according to the maximum quantity allowed per sale in the Inventory Matrix table of the Bits & Bytes database, and
4. Subtracting the quantity sold from the quantity on hand.

The application repeats the process until the number of Sales records reaches the number of transactions for the day. No transactions will be generated on all holidays.

In generating Sales records, the program will monitor the on-hand value of each inventory item. If an on-hand value falls below reordering point, the program will insert a Purchase record based on the parameters in Inventory Matrix table of the Bits & Bytes. Meanwhile, the program keeps track of the Purchase record and will insert a Receive record days later, again, based on the parameters in Inventory Matrix table.

When generating Customer Contact Log and Potential Customer Contact Log tables, the program randomly selects customers and potential customers for sales representatives to contact. It also produces records on the days when the sales representatives should call back. The teacher can specify the maximum and minimum number of calls per day and the maximum and minimum number of days for callbacks.

Once all data are generated, there will be nine tables in the database file that students can use: Customer, Customer Contact Log, Inventory, Potential Customer, Potential Customer Contact Log, Sales Rep, Territory State, Transaction, and Vendor as illustrated in the database model. In addition to the database file that students can use, the Generator also generates a configuration database file. This configuration file contains all the tables in the student file and other tables that allow teachers to customize the database before using it in teaching or learning activities.

With specifications of a six-month time period and a minimum of 20 and a maximum of 100 transactions per day, Business Data Generator generates, in a few minutes, approximately 16,000 records for the Transaction table.

Customized Database Generation

There are two ways in which the teacher can "shape" the data in certain ways and create "problem situations" for problem-solving activities.

Manipulating inventory matrix table. When generating database files, the Generator generates an additional database file. Teachers can then modify parameters in this file and regenerate all or some tables to reshape the data that students will use. Some of the parameters that the teacher can change are in the Inventory Matrix table of this teacher file. It is not recommended, however, to modify any table in the Bits & Bytes database since it is the template for generating other files. Table 1 lists the default values in the Inventory Matrix table for generating a Transaction table.

Table 1 Default Inventory Matrix

Min Price	Max Price	Vendor Cost	Min Order	Max Order	Reorder Quantity	Reorder Point	Receive Days
$1.00	$50.00	82	10	20	250	125	2
$51.00	$100.00	80	7	15	250	125	4
$101.00	$1,000.00	78	6	12	250	125	6
$1,001.00	$2,000.00	76	4	9	250	125	8
$2,001.00	$3,000.00	74	3	7	200	150	10
$3,001.00	$4,000.00	72	2	5	200	150	12
$4,001.00	$5,000.00	70	1	3	200	150	14

The components of Table 1 are:

- Vendor Cost Percentage, which is the percentage used to calculate the vendor cost. For example, for an item with a $50 selling price, the cost is 82% of $50, which is $41.
- Min Order, which is the minimum quantity the application will generate per Sales record.
- Max Order, which is the maximum quantity the application will generate per Sales record.
- Reorder Quantity Percentage, which is the percentage over Max Order that will be used in generating a Purchase record from vendors. For example, the reorder quantity of an item with 20 in the Max Order field is 250% of 20, which is 50. When the application inserts a Purchase record for this group of items, the purchase quantity will be 50.
- Reorder Point Percentage, which is the percentage over Max Order that will be used to decide when to insert a Purchase transaction. For example, for an item with 20 in the Max Order field, the application will insert a Purchase record when the on-hand value falls below 25 (125% of 20).
- Receive Days, which is the number of days it will take to receive an order from vendors. For example, two days after reordering (Purchase) a $50 item, a Receive record will be inserted and the on-hand value will be updated. If the receive date falls on a holiday, it will be received the next day.

By manipulating these parameters, the teacher can, to some degree, "shape" how often Purchase and Receive records will be inserted. This feature is also very helpful for students working with advanced inventory control to experiment and analyze the effects of various reordering points and reordering quantities.

Once the parameters in the Inventory Matrix table of the teacher file are modified, the teacher can update and regenerate some or all tables in the student database file. In this case, the program will use the parameters in the teacher database instead of those in Bits & Bytes.

Reassigning states to sales representatives. Another way to reshape the data and create "problem situations" is to reassign states to different sales representatives. For example, currently sales representative 103 has states with fewer companies in the Company table (MT, ND, SD, ID...). Regardless of the number of customers and potential customers the teacher specifies, sales representative 103 will always have much lower sales and fewer customers, potential customers, and contacts. Reassigning states with more companies to sales representative 103 will increase the number of customers and potential customers the representative has; in turn, the representative will have more sales. Therefore, by reassigning states to different sales representatives, the teacher can create problem situations concerning sales representatives' performances.

Table 2 lists the number of companies in each of the 47 states and the District of Columbia (DC) in the Company table from which customers and potential customers are drawn.

Table 2 The Number of Companies in States

AL	19	FL	69	LA	15	MT	1	NY	210	TN	26
AR	25	GA	58	MA	123	NC	45	OH	120	TX	173
AZ	19	IA	23	MD	33	ND	1	OK	27	UT	14
CA	346	ID	13	ME	7	NE	13	OR	22	VA	65
CO	34	IL	169	MI	77	NH	10	PA	155	VT	5
CT	118	IN	43	MN	76	NJ	96	RI	8	WA	46
DC	18	KS	14	MO	59	NM	9	SC	14	WI	50
DE	16	KY	28	MS	2	NV	6	SD	1	WV	11

Summary

The Business Data Generator was created to provide teachers with a tool to generate realistic, large volumes of data quickly and easily for teaching/learning activities. With simulated business database files, teachers can better prepare students to manage the volume of real business data and to solve the types of business problems they may encounter upon graduation.

Reference

Bruce, T. A. (1992). Designing quality databases with IDEF1X information models. New York: Dorset House.

Alternatives to Traditional Assessment of Student Learning

Nancy Csapo, Ph.D.

Area Needing Improvement

Assessment of student learning should be "designed to maximize the achievement of *all* students" (Covington, 1997, p. 89). However, traditional assessment methods may not be the most effective method for measuring all student learning. Angelo and Cross explain their concern over traditional testing as follows:

> Although classroom teachers have been testing students on their mastery of subject matter for centuries, there is a growing conviction that, as classroom assessment resources, tests are limited in scope and in usefulness. (1993, p. 115)

Most students' preparation for a typical objective test consists of a "memorize and reproduce" approach. Retention of the material sharply decreases following completion of the test and little, if any, long-term retention occurs. Many students experience test anxiety and do not perform well in a traditional testing format. In the end, the test instrument may not only be biased, but may only reflect whether students can perform well in a highly stressful testing situation and whether they are able to memorize for the short-term by studying "the right" material. Traditional tests typically only measure low-level abilities (Angelo & Cross, 1993). Without including in-depth essay questions of some form, it is difficult for the instructor to measure student comprehension of the material and their utilization of higher-level cognitive skills and/or critical thinking skills, problem solving, and independent thought. According to Angelo and Cross, "This higher-order capacity is much more difficult to measure" (1993, p. 116).

Suggested Idea

Meaningful academic work, including the assessment of student learning, should be the goal of every teacher. Research has found undergraduate students' intrinsic satisfaction with a course to come largely from opportunities to "produce things of value in classes" (Covington, 1997, p. 90). Using a project-oriented approach for assessing student learning provides the opportunity for such intrinsic satisfaction. Students are more likely to view projects, especially those designed to simulate work-related situations, as a valued task. According to Covington, anecdotal evidence suggests a correlation between students' perceived value of a course and their success "at valued tasks over which they have some choice and control" (1997, p. 88).

Project-oriented assessment can be an effective tool for assessing student learning because it: (a) reduces anxiety for students; (b) eliminates the need to memorize and reproduce material; (c) maximizes the achievement of all students; (d) develops research skills; (e) promotes collaboration and teamwork; (f) provides a means for students to demonstrate their mastery of the material through their utilization of higher-level cognitive skills; (g) increases long-term retention of course material; and (h) eliminates concerns about cheating.

Procedures

One of the best approaches to the project design is a capstone experience. This experience utilizes the course materials from the semester. The project is designed to be a simulation of something students could expect to deal with in the work world. Projects could be assigned on an individual basis, or to teams of five or fewer. Include a formal presentation, typically 20 minutes in length, to be given by each team to the rest of the class in the design of the project.

The project itself must be well defined, but still leave teams with choices and decisions to make. Explain to teams (or individuals) that their finished projects are not expected to be identical. Requirements must be explained, but leave room for creativity to avoid "carbon copy" final products. Give students a copy of the project criteria in the grade sheet format (rubric) that is used to grade their completed projects. On this grade sheet list the different requirements of the project and the points assigned to each. Teams (or individuals) should use it as a checklist to keep track of what they've completed and still need to complete.

Depending on the depth of the project, allow from three to four weeks (and sometimes longer) for students to complete their project. Having an ongoing project like this helps utilize any "spare" time during a class period. Remaining class time can always be used for project work. During the last few weeks of the project, plan adequate class time for teams to meet and work on their projects. Teams are encouraged to delegate responsibilities so work can be completed on the project outside of class without requiring team members to formally meet as a group outside of class.

Peer evaluations are the only individualized assessment component of each student's project grade. Students are made aware of the peer evaluation component and the potential effect on their project grade (both positive and negative) at the beginning. Use of peer evaluations provides an additional incentive for students to be effective, contributing team members. The peer evaluations may be weighted 10% of the final grade. This creates a potential variation of 10% between individual team members' project grades and gives students the opportunity to provide feedback on their fellow team members.

Results

Students have responded favorably to a project-oriented approach to assess their learning versus traditional testing methods. Particularly upon completion of the project, students are extremely positive. Many students comment on how valuable the project was for them as a learning experience. Many times students have expressed their appreciation, explaining how the project was a true capstone experience for them, giving them a sense of "fitting all the pieces of the course together" with a "real world, hands-on" experience.

Projects also serve as a self-assessment tool for the teacher. As Cross explains, "In classroom assessment the learner is the observed, because that is the clue to how well the teacher is doing" (Rhem, 1992, p. 3). Observing student performance while working on the project, as well as evaluating the finished project, provides the opportunity for teachers to measure how well what they are doing is working for students.

Suggestions

A project-oriented approach to assessment as an alternative to traditional testing can be used in most curricular areas, including accounting, business communication, computer/management information systems, management, and methods classes.

The only supplies needed are the project directions and criteria. Use a handout to explain the project and outline the criteria for successful completion. One of the first decisions the teacher needs to make when designing the project is whether it will be an individual or team project. In addition, the teacher must decide if a formal presentation will be part of the assessment process. Determining the criteria for a successfully completed project, e.g. what is turned in and in what format, are also important decisions and provide the most valuable direction for students.

References

Angelo, T. A. & Cross, P. K. (1993). *Classroom assessment techniques: A handbook for college teachers* (2nd ed.). San Francisco: Jossey-Bass.

Covington, M. V. (1997). A motivational analysis of academic life in college. In R. P. Perry & J. C. Smart (Eds.), *Effective teaching in higher education: Research and practice* (pp. 61-100). New York: Agathon Press.

Rhem, J. (Ed.). (1992). Classroom assessment/classroom research: Four years into a hands-on movement. *The National Teaching & Learning Forum, 1*(6), 1-3.

Applying the Principles of Developmental Learning to Accounting Instruction

Burt Kaliski

Area Needing Improvement

The accounting course often seems to be taught, as are so many other subjects, in a lecture format. Solving problems may also be a regular part of instruction. Neither approach to learning accounting takes into consideration that accounting can be learned in the approach that has worked so well over the years for learning keyboarding—the developmental approach.

Suggested Idea

The developmental approach could be adapted quite easily and successfully to accounting instruction. If you think about the "typical" keyboarding lesson in the period of learning the keys, it goes as follows: review old keys, learn new keys, practice new keys, practice new and old keys together. Why not use this approach to learning in the accounting classroom?

Procedures

The developmental lesson is one that consists of six parts: apperception, motivation, development, application, summary, and assignment. In the keyboarding lesson, apperception (mental set) is accomplished by reviewing the old keys; motivation is attained by introduction of the idea of learning new keys; development is the actual mastering of the new keys; application is practice on the new keys; summary is practice on both old and new keys; assignment is additional practice to firm the base for apperception in the new lesson. Here's how this sequence might apply to a lesson in accounting. For illustrative purposes, let's take the first lesson in adjusting entries. This lesson is one that is challenging for the students, which adds to the need to learn it developmentally. Assume that the first adjustment to be learned is for supplies used.

Apperception. Begin the lesson as you might begin many accounting lessons with a review of the basic equation and the rules of debit and credit, for apperception is always comprised of material that is already learned. Then ask the following questions: What is the normal balance of an asset account? What is the normal balance of an expense account? The stage should now be set.

Motivation. This part of the lesson tries to get the students interested in the new topic, but in as indirect and stimulating a manner as is possible. Often a "What if" approach works in accounting. In the lesson at hand, you might ask "Who recently bought a pair of pants that did not fit? What had to happen in order to make them fit? They had to be adjusted. In accounting, there are times when accounts don't quite "fit"; they need to be adjusted. What do you think we are going to learn today?"

Development. Once you have caught the students' attention, it is as if you are the salesperson whose foot is now in the door. You are ready to proceed in a step-by-step manner with learning the new material. For the lesson on adjustments, you will take the class through the entry for the purchase of supplies and will then talk about taking an inventory of supplies at the end of the period. You will ask about how much of the balance in the Supplies account is an expense and how much is still an asset. You will then demonstrate the adjusting entry to show both amounts correctly. You have begun the process of developing the new concept.

Application. Immediate practice is key to learning new material. Thus, you will now provide for the class to do two or three examples of calculating the amount of the adjusting entry for supplies and journalizing the adjusting

entry. You will go over the answers and be sure that the class is with you to this point. If they are, you can continue; if not, you can go over the new material again.

Once practice is complete, if there is time left in class, you can return to more development and more application. The point here is that development is not a series of steps that are practiced only after all steps are presented; it is a series of steps that are practiced along the way to be sure that each step is mastered before continuing. Thus, development and application form a cycle, with each part of the lesson feeding into the next part.

Summary. Lessons should not be ended by the "bell," but by the teacher. There should be a conscious effort to summarize the lesson, with the effort ranging from a general "What did you learn today?" to a very focused series of questions. These questions might include "Why are accounts adjusted?" and "What is the entry to adjust the Supplies account?"

Assignment. To maximize learning, there should be some activity to be done for the next class. In accounting, this can be in the form of reading, answering questions, doing journal entries, or a combination of these items. Another advantage of assigned material, as mentioned earlier, is that the apperception for the next class can be a review of the assigned material. Your next accounting lesson can start with going over the homework from the previous class.

Results

This developmental manner of teaching accounting has worked for the author for 30+ years. The approach is logical and builds learning in a step-by-step manner. It provides continuity from lesson to lesson as well as allowing each lesson to be intact. This seems to be the ideal type of lesson—complete unto itself but connected with previous and future lessons. This approach also makes instructors plan effectively and carefully, paying much attention to detail.

Suggestions

Beyond accounting. The developmental approach can be used in any subject in the business education curriculum. It can be used at the middle school, secondary, and post secondary levels. Learning is but a series of accumulations of small bits of knowledge, values, and skills. Planned instruction for learning in each of these domains can only benefit students, the instructor, and the business education curriculum.

Collaborative Teamwork in the Classroom

Shelia Tucker

Area Needing Improvement

The Secretary's Commission on Achieving Necessary Skills (SCANS) Final Report noted that high-performance workplaces require, among other things, that workers be able to work productively and amicably with others (Academic Innovations). Alexander and Stone (1997) reported, however, that entry-level employees lack this crucial workplace competency.

All too often students attend classes for an entire semester and leave never knowing or having any interaction with their classmates. The classroom atmosphere can become competitive as opposed to collaborative. This activity focuses on developing teamwork competency in courses so students will have the teamwork skills necessary for successful collaboration in the workplace.

Suggested Idea

The idea involves structuring classes so that first, students have an opportunity to get to know each other and second, they have an opportunity to work together throughout the semester.

Procedures

On the first day of class, students are encouraged to introduce themselves to, and obtain e-mail addresses and telephone numbers from at least five or six of their classmates. They are instructed to state their names, where they are from, their major, and their hobbies. Students then take turns introducing each other to the class. This exercise proves to be an excellent ice breaker.

To help alleviate competitiveness and promote a collaborative atmosphere, students are encouraged to help each other during class. For example, in Introduction to Information Processing, if one student experiences difficulty learning a Microsoft Excel concept, another student looks at his computer screen and tries to help. The instructor monitors this assistance. Students are awarded extra credit for helping each other.

Additionally, students are assigned a project that requires them to research pertinent topics. An example of a topic for the Administrative Office Management course deals with how to handle workplace issues effectively. Research might be conducted on the issue of workplace violence through use of the Internet, the library, interviews, etc. Next, a research paper is written that incorporates discussion of "real world" implications for the topic as well as a policy to address this issue. Finally, PowerPoint and other multimedia applications are used to present the findings to the class.

Students are required to work together in teams of three. Before teamwork begins, the students have a brainstorming session on the meaning of the concept of teamwork. Students share their views on the meaning of as well as the importance of teamwork. Next, they discuss problems that might be encountered while trying to work together as a team as well as possible ways to overcome such problems.

Students are provided with an information sheet that lists the guidelines for developing the research paper, presentation, and grading scheme (Figure 1). They are also provided with a Group Evaluation form (Figure 2) and a Student Evaluation of Presentation form (Figure 3). In addition, they are given a handout that provides tips on effective presentation skills. The Group Evaluation form is used so that group members

may evaluate themselves and their team members. They are allowed to assign a numeric grade from between 0 to 100. Each student receives three grades. These scores are averaged to calculate the group evaluation grade.

The Student Evaluation of Presentation form serves a two-fold purpose. It is used so that class members may evaluate the groups as they present. This information is reviewed by the instructor and then provided to each group so they may see how their classmates evaluated them on their presentation. Also, some students have a tendency to not attend class on days that presentations are scheduled unless it is their day to present. To deter this type of behavior, a grade is given for the number of presentations evaluated. For example, if there is a total of eight presentations, students receive 12.5 points for each group they evaluate (12.5 x 8 = 100). Thus, a student may lose between 25 and 33 points per presentation day depending on how many presentations are given.

Occasionally, a student insists on not fulfilling her obligation as a team member. If attempts to get a student to complete her share of the workload fails, the class and instructor agree that this student could be FIRED from the group. If a student is fired from a group, she is responsible for completing the entire project on her own. She is not allowed extra time to complete the project.

Results

Immediate positive results were noticed, starting with the introduction technique. Formerly, students introduced themselves to the person beside them and then they introduced each other to the class. This technique seemed to work well. However, when students began to get up, move around the classroom, and meet at least five or six classmates, the atmosphere of the class changed. Student participation in class started off at an extremely high rate. Students appeared to be more relaxed. They were much more responsive and participated more in class than in previous semesters when the old form of introductions was used.

Additionally, positive results were observed with the process of rewarding students for helping each other in class. If a student would call on the instructor for help, another student would automatically jump up and go try to help. The instructor would monitor the assistance to ensure that the problem was solved and then comment to the student who helped, "Thanks for helping, I'll remember you!" It was evident from facial expressions that students were not only happy about receiving extra credit, but their faces beamed with a sense of pride, self-worth, and accomplishment at being able to help someone else.

Upon completion of the research project, testimonials surfaced with regard to being required to work as a member of a team. One student said employees on her job wondered what had happened to her. She was so much easier to get along with. She replied to them that she had learned what it meant to be a member of a team. Her performance had caused her team to receive a low score on their research paper. By the time they finished the whole process, she had gained an appreciation for collaborative efforts. In addition, older students noted that they had reservations about being placed on a team with younger students. However, they were surprised to find that this experience proved to be rather enjoyable and rewarding. Most students said they gained new friends. A few students lost old friends. General consensus of the class was that the assignment caused them to have a heightened sense of awareness with regard to what it means to work collaboratively and function as a team member.

Suggestions

This activity could be used for almost any curricular area. The research topic must be appropriate to course content within each class in which this idea is implemented.

References

Academic Innovations. Retrieved from the World Wide Web: http://www.academicinnovations.com/report.html

Alexander, M. W. & Stone, S. F. (1997). Student perceptions of teamwork in the classroom: An analysis by gender. Business Education Forum, *51*(3), 7-10.

Figure 1
RESEARCH PAPER INSTRUCTIONS

Listed below are guidelines for developing your research paper and PowerPoint presentation:

RESEARCH PAPER

1. The research paper must be seven (7) to nine (9) pages in length, excluding the title page and reference page. (10 point deduction for each page short of seven pages)

2. The paper will be graded on:
   a. Mechanics
   b. Correct grammar, punctuation, spelling
   c. Content
   d. Use of MLA or APA writing style

3. Be careful not to plagiarize. If you obtain information from a source, you must give credit to the author(s) within your paper.

4. You may want to take your paper to the Writing Center and have them review it.

5. Each student will evaluate his/her own performance as well as the members of his group. The group evaluation form will be handed out in class.

6. Avoid run-on sentences. Read and reread your paper with your audience in mind. Write as though no one else knows what you are saying. Your writing must be clear, concise, and easy to follow.

POWERPOINT PRESENTATION

1. All group members must have a speaking part in the presentation.
2. The presentation should be 20 minutes in length.
3. Use your judgment as to how many slides should be in the presentation.
4. Incorporate graphics, sound, and animation. Be creative.
5. Some type of background should be used.
6. Have a backup plan such as transparencies in case of equipment failure.
7. Incorporate special features such as transitions and effects.
8. Professional dress is required

ADDITIONAL INFORMATION

1. **Group Evaluation Forms**: If a student does not submit group evaluation forms, that student will receive a "Zero" for group participation.
2. **Group Participation:** If a student is **FIRED** from a group because of poor participation, that student will be responsible for the entire project "using a different subject." The same requirements will apply, and there will be no extension of time for the project to be completed. The students that remain in the group will be responsible for the completion of the project.
3. **Deadline for Reviewing Papers**: I will not review any papers after (date). Should you decide to have me review your paper, you must allow a time frame of three days for me to review it and return it to you with my comments. **NO EXCEPTIONS.**

GRADING SCHEME:

1. Relevance of material covered - 35%
2. Presentation length 20 minutes - 15% (-10 points for every minute under 20 minutes, no penalty if it goes slightly over 20 minutes.)
3. Professional Dress - 10%
4. All members present - 10%
5. Backup plan - 10%
6. Appropriate use of graphics, sound, and animation - 15%
7. Transitions and effects - 5%

Figure 2
Group Evaluation Form

Group Member (self) NAME:_____ SCORE_____
Group Member (2)_____ SCORE_____
Group Member (3)_____ SCORE_____

Excellent = 100 Good = 85 Average = 75 Fair = 60 Poor = 0

In working with the team, did you...	SELF	GM (2)	GM (3)
1. Display punctuality and regular attendance when working in class and out of class with group members?	Yes___ No___	Yes___ No___	Yes___ No___
2. Help organize group work?	Yes___ No___	Yes___ No___	Yes___ No___
3. Assist in involving all members?	Yes___ No___	Yes___ No___	Yes___ No___
4. Set positive examples for others?	Yes___ No___	Yes___ No___	Yes___ No___
5. Contribute ideas, suggestions and effort for completion of group tasks?	Yes___ No___	Yes___ No___	Yes___ No___
6. Solve conflict in positive ways?	Yes___ No___	Yes___ No___	Yes___ No___
7. Identify and define problems/issues?	Yes___ No___	Yes___ No___	Yes___ No___
8. Consider the consequences of actions?	Yes___ No___	Yes___ No___	Yes___ No___
9. Make informed decisions?	Yes___ No___	Yes___ No___	Yes___ No___
10. Complete tasks on time and meet deadlines?	Yes___ No___	Yes___ No___	Yes___ No___
11. Display confidence in self and work?	Yes___ No___	Yes___ No___	Yes___ No___
12. Demonstrate initiative?	Yes___ No___	Yes___ No___	Yes___ No___
13. Assess/evaluate criticism?	Yes___ No___	Yes___ No___	Yes___ No___
14. Exhibit self-control?	Yes___ No___	Yes___ No___	Yes___ No___
15. Work without close supervision?	Yes___ No___	Yes___ No___	Yes___ No___
16. Exhibit trustworthy behavior?	Yes___ No___	Yes___ No___	Yes___ No___
17. Exhibit sensitivity to the attitudes, values, and feelings of others?	Yes___ No___	Yes___ No___	Yes___ No___
18. Adequate research	Yes___ No___	Yes___ No___	Yes___ No___

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Figure 3
STUDENT EVALUATION OF PRESENTATION

Group _____
Student Evaluator _____
Topic _____

1. How much time would you say the presenters spent on this project? Check your response.

   A minimal amount of time____ A great deal of time____ Almost no time at all____

2. Were the opening and closing clear and well planned? Yes___ No___

3. Did the speaker help you to remember two to four main points? Yes___ No___

4. Write one question you feel could be asked of anyone who listened to this report to see whether they learned something about this subject. The question may be in any form.

   _____
   _____

5. Presenting the Message: Rate on a scale of 1 to 5. (5=Excellent, 4=Good, 3=Average, 2=Below Average, 1=Poor)

   a. Opening: personal introduction, opening statement, confidence_____
   b. Presentation: presentation clarity, too rapid or too slow_____
   c. Visual Aids: logical order of presentation ____
   d. Organization of Presentation: Neatness and organization of material____
   e. Close: Summary and conclusion of presentation; opening for call-back_____
   f. Voice: pitch, tempo, volume, enthusiasm, enunciation and pronunciation_____
   g. Reaction Under Pressure: handling questions and objections, answering questions, etc._____
   h. Shows interest in the subject_____
   i. Uses eye contact with entire audience_____
   j. Interacts with the audience_____
   k. Aware of audience's needs_____
   l. Uses appropriate gestures_____
   m. Appears confident in presentation_____
   n. Appearance is appropriate_____
   o. Uses vocal variation_____
   p. Uses correct grammar_____

6. You are to assign a point value to this report where 10 is the highest and 0 is the lowest. Based on content, presentation, enthusiasm, etc., how many points would you assign?

   10 9 8 7 6 5 4 3 2 1 0

7. If you could give one helpful hint for future use in giving an oral presentation, what would it be? Add one statement of praise.

COMMUNICATING STATISTICS – MEASURES OF CENTRAL TENDENCY

Carol Blaszczynski

Area Needing Improvement

Many times students do not see the relevance of statistical concepts to their everyday lives. Terms and procedures are memorized, but students feel little connection to the textbook data. Past observations while teaching mathematical concepts were that students sometimes memorize mathematical terms in a particular order. The three measures of central tendency, for example, may be presented in this order: mean, median, and mode. If responses on a test are asked for in a different order (such as median, mode, and mean), some students would incorrectly answer the items using the order in which the concepts were first taught.

Suggested Idea

Use data generated by the students themselves to bring a realistic view of data. When students actively participate in gathering data, they understand the basic concept of obtaining valid and reliable data. This is particularly true when the data describes them. Furthermore, student interaction is involved which will require the act of communicating statistical concepts to others.

Procedures

When covering a unit on measures of central tendency, concepts are presented to the students. An example is used to illustrate the calculation of each of the three measures: mean, median, and mode. Following this introduction, students receive forms for gathering data, which guide them in interviewing each other in teams of two. Depending upon the grade level of the class, the length and complexity of the form will vary.

Here are some sample questions that might be used on the form:

> How many movies have you watched in the past month?
> How many miles did you travel to school?
> How many animals do you have?

Data for each pair of students are recorded on an interview form and communicated orally to the class. As students report the data to the class, a frequency distribution is developed by the instructor. Then student teams calculate the measures of central tendency. After computing these measures, each student team writes a paragraph summarizing and reporting the central tendency measures.

Results

Students have greater mastery of learning when the examples and data are real, rather than stemming from an outdated textbook and unrealistic situations. By encouraging students to gather the data, they have a better appreciation for the steps a researcher goes through to obtain data. In addition, they understand the steps behind the statistics that are used in the media and are better able to determine if the research methods used are sound.

Students use various modalities in this activity: reading, writing, speaking, listening, recording, and viewing the data visually in a frequency distribution. This richness of modalities enhances learning. Furthermore, the writing portion of the activity helps students to take ownership of their learning.

Elliott (1996) provides a case for communicating about math:

> As we move rapidly into the next millennium, with IT growing exponentially, it will not be enough to know a few isolated facts in arithmetic. Children will need to make sense of and communicate in, the quantitative world they are inheriting. This mathematics sense-making will require them to read, write, experience, explain, discuss, define, and clarify for themselves and others what are sure to be cognitive dissonances in their realities. The teaching of reading, writing, and arithmetic in this increasingly symbol-laden society will need to be shifted to reading and writing *about* mathematics, if true mathematics literacy is to be achieved. (p. ix)

Communicating about math encourages critical reflection in students. Rather than jumping from experience to experience, they are allowed to make the learning their own. Powell and Lopez (1989, p. 158) developed a dynamic model of learning called critical reflection that contains the two components of feelings and thoughts. One method being used to encourage critical reflection in quantitative areas is writing to learn. The National Standards for Business Education also encourage written and oral expression as an avenue of communicating understanding of mathematical problems (NBEA, 1995).

An added bonus of using this activity is that students may come to realize that statistical concepts are not dull or boring. Rather, they are simply a device or language used to describe characteristics or behaviors of people.

Suggestions

Variations of this activity can be used in almost any class that incorporates quantitative concepts. Some examples of such classes include business mathematics, accounting, economics, information systems, and report writing. This learning activity could be extended by constructing visual aids, such as tables and graphs. Additionally, students could also calculate standard deviations of the data collected.

Active student involvement promotes mastery learning. Encouraging students to engage in critical reflection by communicating results to others enhances the quality of learning.

References

Elliott, P. C. (Ed.). (1996). Communication in mathematics: K-12 and beyond. Reston, VA: National Council of Teachers of Mathematics.

National Business Education Association (NBEA). (1995). National standards for business education: What America's students should know and be able to do. Reston, VA: Author.

Powell, A. B. & Lopez, J. A. (1989). Writing as a vehicle to learn mathematics: A case study. In Connolly & Vilardi (Eds.), Writing to learn mathematics and science (pp. 157-177).

Creating a Global Business Plan for Exporting

Les Dlabay

Area Needing Improvement

Various studies reveal that many small and medium-sized businesses are not involved in exporting in spite of the fact that they offer products and services with strong global market potential. As students prepare for employment in small and medium-sized enterprises, awareness of exporting and importing opportunities is vital. An emphasis on multi-disciplinary content and involvement-oriented instructional strategies will help students develop technical and human relations skills along with international career and global entrepreneurial competencies to serve them as they live and work in the global economy.

Suggested Idea

This student-centered, multi-media, multi-disciplinary instructional experience provides students with an opportunity to create a global business plan while developing an awareness of exporting and importing business opportunities for small and medium-sized enterprises.

Procedures

1. Have students work in teams of two to four students.
2. Plan use of instructional resources, including:
   - Interviews with business people and government officials regarding exporting and international trade activities.
   - In-store observations and company visits.
   - Speakers representing business, government, labor, and foreign countries.
   - Visits to sites such as cultural museums, the World Trade Center, and consulates.
   - Videos designed to communicate global business opportunities and foreign business environments.
   - Web sites to provide research sources for creating the business plan.
3. Students conduct research on the following elements for the international business plan, involving the following activities:
   - Identifying **international business opportunities** for small and medium-sized companies that desire to enter or expand in foreign markets.
   - Assessing geographic, economic, social-cultural, and political-legal factors that create foreign business opportunities and that may affect **the business environment of foreign markets.**
   - Developing a **mission statement and strategic alliances** for planning and implementing global business activities.
   - Developing a **product concept** for an appropriate foreign market.
   - Conducting **marketing research** to identify appropriate market segments.
   - Planning **funding sources and cash flow analysis** based on pricing strategies.
   - Planning **human resource needs** including identifying, recruiting, and selecting needed personnel.
   - Creating a **distribution and promotional strategy** that adapts to the economic, social-cultural, political-legal environment of the country.
   - Implementing a **time line and assigned responsibilities** for the various elements of the business plan.
   - Measuring success, including **assessing economic and social benefits and costs** for the business and host country.

   (NOTE: Some of these business elements may be eliminated depending on the background of the students and the time commitment for this activity.)

Results

The final product of this business plan activity may include one or more of the following:

- A written business plan with descriptions of the elements described above.
- An oral in-class presentation or student-created video highlighting the key points of the business plan along with product samples, field research interviews, and proposed promotions.
- A student-created newsletter or web site with key points of the business plan.
- A poster seminar session in which students present highlights of their business plans to other students, faculty, representatives from business, and the people from the community.

Suggestions

This activity could be adapted for use in any course in which a global business assignment or unit is desired. Most appropriate are: Introduction to Business, Marketing, Entrepreneurship, and International Business courses.

In addition to library reference materials, the following web sites may be useful for country information and global business activities:

- Asian country information at http://asnic.utexas.edu
- Eastern European country information at http://reenic.utexas.edu
- Latin American country information at http://www.lanic.utexas.edu
- Middle East country information at http://menic.utexas.edu
- Current country information at http://yahoo.com/regional/countries
- World Factbook at http://www.odci.gov/cia/publications/factbook/index.html
- State Department Country Notes at ww.state.gov/www/background_notes/index.html
- International Trade Administration at http://www.ita.doc.gov
- U.S. Trade Center http://usatc.doc.gov and www.usatrade.gov
- World Trade Centers Association http://www.wtca.org
- Global Business Web at www.gbw.net
- Federation of International Trade Associations http://www.fita.org
- Small Business Administration at www.sba.org
- Embassy information at www.embpage.org; www.embassy.org/embassies/index.html

Creating a Supportive Learning Environment

Rose Chinn

Area Needing Improvement

Many students go through school generally being ignored. They may not be the best students, but they rarely cause trouble. They usually receive very little of the teacher's time. Some sort of acknowledgement or incentive should be given to these students to develop or positively affect motivation.

Suggested Idea

This idea is based on the belief that if students are good, they should be rewarded. Reward appropriate behavior—don't ignore it. Give students recognition and appreciation for their positive behavior. According to the behaviorist psychologists' theory, rewards for tasks can enhance motivation and creative ability (Bower, 1994).

Procedure

In a Business Principles and Applications class, "Business Bucks" are distributed to the students. One Business Buck is equal to $1 and is used to pay for items students purchase at an auction held at the end of the semester. These Business Bucks are given to students any time they are caught doing something good. During the past two years students have received Business Bucks for doing the following:

- Turns in every homework assignment on time for a week or over a two-week period
- Volunteers during the class period
- Prepares for class and is ready for the day's lesson
- Contributes to the class discussion
- Attends class every day over a specified period of time

These are just a few examples of the types of things students do to earn Business Bucks. These Business Bucks are distributed to the business students throughout the semester. As the semester draws to a close, businesses in the community are contacted and asked for some type of gift or contribution to be made toward the auction. For the most part, businesses donate gift certificates. On occasion, businesses provide an opportunity for the teacher to come pick out merchandise at their stores.

During the last week of school, the auction is held. The students bid on the items that have been donated and pay for these items with the Business Bucks they have earned.

Results

Some students were quite excited about the merchandise that was being auctioned and glad they had been rewarded for their efforts. Other students were disappointed that they had just a few Business Bucks and wished they had more. A few students were surprised at the number of items that had been collected from the businesses in the community.

A couple of times during the semester, students wanted to trade their Business Bucks in for extra credit points. This was not the purpose of distributing the Business Bucks, and students were glad the game plan was not changed.

Suggestions

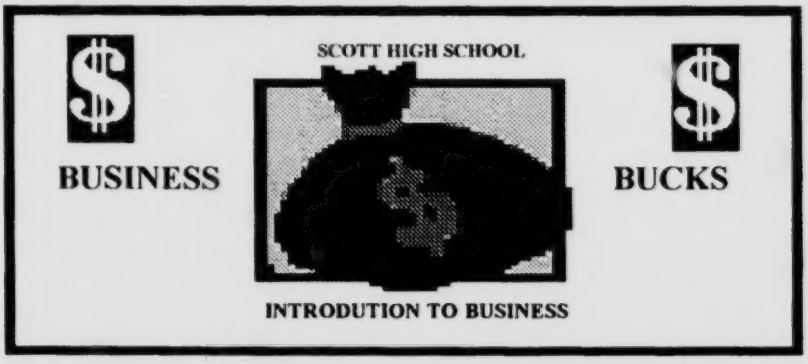
Start early in the semester contacting businesses for merchandise and gift certificates. Here's a checklist of items to cover when calling the businesses:

- State the purpose of the call—find out if their business would be interested in making a contribution to the auction
- Give school name and courses taught
- Indicate material covered during the semester
- Explain Business Bucks are distributed to students throughout the semester and are forms of incentives for the students
- Explain an auction will be held during the final week of class and students will get the opportunity to bid on items with their incentive Bucks
- Ask for contributions of merchandise or gift certificates to the auction
- Volunteer to pick up their contribution or indicate they could mail it to the school
- Thank them for their time, contribution and/or consideration
- Send thank you notes if they do contribute

Make calls early in the semester. The time spent calling on businesses was quite time consuming but well worth the effort.

The Business Bucks were made on the computer using clip art and a little creativity in the design. Four Business Bucks can fit on a page. A copy of the Business Bucks used is included here as an example. Copies of the Business Bucks were made on green paper. When a Business Buck was given to a student, his/her name was written on it. This provided an opportunity to show ownership and made them feel special. This Business Bucks should be marked to prevent students from making duplicates.

Incentives are almost always popular and could easily be implemented in any curriculum.



Reference

Bower, B. (1994 June). Rewards resurface as creativity enhancers. *Science News, 145*(26), 405.

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Developing Job Survival Skills

R. Neil Dortch

Area Needing Improvement

Students are often taught how to complete a successful job search, write an effective resume, successfully navigate the shoals of the interview process, and secure a job. These same students, however, are often unprepared to survive and thrive in the corporate culture, i.e., hold on to the job. It is my belief that these students need instruction on how to survive on the job through the development of job survival skills. This aspect of instruction can be added to an already existing employment unit.

Suggested Idea

Provide students the opportunity to become aware of the need to understand the corporate culture and the development of a set of job survival skills. This can be achieved by extending the employment unit to include the research and development of job survival skills.

Procedures

This topic is used in a course called Career Information, which is a required course for junior/senior students graduating with a degree from the College of Business and Economics. Students are given a course outline on the first day of the class. Students begin by completing a personal inventory which will be used in the development of a resume and preparation for mock interviews. The purpose of the personal inventory is to have the students do a bit of introspection, recalling long-forgotten dreams, aspirations, talents not fully developed, interests, and hobbies laid aside; and to look at the whole person.

Want ads from the local newspapers are brought to class and discussed. Students are encouraged to research companies in which they are interested. This can be done via the Internet or at the campus library. Two good sources are Valueline Investment Survey Ratings and Reports and Moody's Handbook of Common Stocks. Not only does this expose the students to two different publications, it also provides the opportunity for them to discuss "casting their lots" with financially healthy vs. unhealthy companies. Students are encouraged to study annual reports of companies in which they express an interest. In addition to the financial information, they can, to a large extent, get ideas on the philosophy of the companies, the values these companies espouse, etc., and compare them to their own philosophies and values. This exercise is completed with the students responding to a question, "Now that you have researched the companies in which you have an interest, do you still want to work for those companies?"

Teachers using this idea have a wide selection of materials from which to choose—books, periodicals, and Internet materials. The Best Jobs for the 21st Century, by Krannich and Krannich, Getting Hired, by Edward J. Rogers, and Graduate's Guide to Business Success, by Emerson Taylor are recommended. What Color is Your Parachute, by Richard Bolles is another good suggestion for occasional use. Useful material is available from The Wall Street Journal and The Milwaukee Journal Sentinel. Students enjoy the frequent discussions and exchange of ideas this activity provides. Invariably, someone will have an article that no one else in the class has. This fosters a bit of competition as to who can get the most and best and share it with the rest of the class.

Resumes and cover letters are discussed and written for a specific position after the research on companies has been completed.

The topic of interviewing is thoroughly researched and discussed with input and even mock interviews conducted by representatives of local companies who donate their time for this activity. It is at the conclusion of this activity that many units on employment end. However, this is when the job survival component is added to the employment unit.

Students are directed to research the Internet, newspapers, and periodicals for articles applicable to job survival. Internet articles such as "The Seven Secrets of Long-Term Career Survival," "What High Performers do in their First Ninety Days," "Do's and Don'ts to Help You Fit into the Organization," "Seventeen Things You Should Never Say at Work," "First-Job Survival Guide," and "What is an Employee to Do?" provide the basis for discussion and the final activity of the employment unit—developing a set of job survival skills.

Members of the class become excited after the initial groans and complaints of "too much work, too little time, and who really does this stuff." The excitement is sustained throughout the unit via discussion, sharing of ideas, and the eventual agreement of what is to appear on the job survival list. The awareness that the job search is not complete until the students have learned all they can about surviving on the job and have developed a list of survival skills is the major objective. The serendipitous rewards are many and varied, depending upon the student—learning the value of deciphering a company's annual report (reading between the lines to get a lead on what the philosophy of the company really is, etc.), and learning of the many resources available to them in the library, on the Internet, and through the newspapers.

A list of job survival skills developed by a class might look something like the following, but will vary according to sources reviewed and the makeup of the class:

Job Survival Skills List

1. Know your goals.
2. Will the job you are accepting help you to achieve those goals?
3. Do you like to work with people, data, or machines?
4. What motivates you?
5. Understand your own moral values.
6. Are you a self-starter, or do you prefer direction? (Nothing is wrong with being either. Just know which you are and don't be placed in a position that requires you to be something you are not.)
7. Know and understand the company procedures and policies.
8. Know what others expect of your job.
9. Get to know your boss—pet peeves, strengths, weaknesses—and adapt appropriately where you can.
10. Slowly get to know co-workers—those who can help you and those who can hinder you; the troublemakers and the practical jokers; the achievers and the non-achievers; and those who are semi-retired on the job.
11. Beware of office politics—become aware of who really is in power in the organization.
12. Learn who has the ear of the boss.

Suggestions

This unit may be used in a general business class, a human relations class, or in a business communication class. Computers with Internet access are available in most schools now. Newspapers and periodicals are available in the school library. Thus, the cost to the student is minimal and the benefits are great.

Resources and Works Recommended

Bolles, R. N. What color is your parachute. (A new edition is out each year.)

Krannich, R. & Caryl, R. (1998). The best jobs for the 21st century. Manassas Park, VA: Impact Publications.

Milwaukee journal/sentinel.

Moody's handbook of common stocks.

Rogers, E. J. (1982). Getting hired. Englewood Cliffs, NJ: Prentice-Hall, Inc.

Taylor, E. (1997). Graduate's guide to business success. Mansfield, OH: BookMasters, Inc.

Valueline investment survey ratings and reports.

Wall street journal.

Engaging Students in Personal Finance and Career Awareness Instruction: "Welcome to the Real World!"

Thomas Haynes

Area Needing Improvement

"This is boring..., who needs this stuff anyway..., I don't need to know what I am going to do as a career until I get out of high school..., I won't have money problems when I get out of school; I already have a job..." And so it goes, we have all heard these naïve assertions from our students regarding why they don't need or want to learn about personal finance, consumer decision making or career development. Yet, as professional business educators, we know that having comprehensive knowledge, experience, and skills related to these adult subjects can provide a clear focus and the motivation to pursue our dreams in a rationale manner. That is what "Welcome to the Real World!"© is all about.

How does "Welcome to the Real World!" relate to young people? The "Welcome to the Real World!" program connects to state learning standards (specifically in Illinois, the Illinois Learning Standards in language arts, mathematics, and social sciences). In addition, it is linked to personal finance and career awareness standards of the National Business Education Association. This program can be used to help young people:

- Explore careers available to them.
- Investigate how career choices can be influenced by education and other factors.
- Make consumer choices related to future independent living.
- Learn skills needed to manage their finances.
- Evaluate their success in managing their monthly income and expenses.
- Explore alternatives to balance a budget and develop a spending plan.
- Observe services provided by a variety of business representatives that assist with consumer and career decision making.

Based on the needs expressed by high school teachers, business people, and higher education officials, staff from the University of Illinois Extension Service, prepared "Welcome to the Real World!" program.

Suggested Idea

The "Welcome to the Real World!" program consists of three parts: career exploration, expenditure decision-making and money management, and choice evaluation. The program is an active, hands-on experience, which gives young people the opportunity to explore career opportunities and make lifestyle and budget choices similar to those adults face on a daily basis. In this simulation of the real world, participants are to assume that they have completed basic educational requirements for their chosen career and are single, 25 years of age, and independent with no financial support from family or others.

The participants explore potential careers or occupations that they would like to pursue in the future. After they choose an occupation, they receive a monthly salary for that occupation and then proceed through the *Real World* activity, deducting taxes, determining a savings amount, and spending their "salary" on the necessary and luxury items that reflect the occupation and lifestyle they have chosen.

After choosing an occupation, participants receive a monthly gross salary that corresponds to that occupation. They then deduct income-related taxes and determine how much of their net salary they wish to save. Using a sample savings account register, participants enter the amount of their savings.

Each participant receives a sample packet of checks, a deposit slip, and a checking account register. After subtracting the savings amount, the "net" salary figure is deposited into the checking account and recorded in the check register. Throughout the activity, the participants keep track of their finances with their check register. Whether they have adequate funds or run out of money, they continue through the activity and finish with either a positive or negative balance.

After making their deposits, the participants then proceed with the *Real World* simulation and make spending choices from the following categories:

- HOUSING - The participants choose from a selection of options: renting vs. purchasing, house vs. apartment, etc. They cannot split the rent/purchase cost with a roommate; the purpose is to demonstrate the expense of living on your own. Participants write a check for the total monthly housing bill and deduct the amount from their checking account balance.

- TRANSPORTATION - The participants choose from a selection of options regarding new autos/trucks: sports car, compact car, mid-size car, small truck, sport utility vehicle. They also figure in a predetermined cost for gasoline, oil changes, etc. The participants write a check for the total monthly transportation costs.

- INSURANCE - The participants select varying degrees of insurance. Homeowners or renter's insurance and automobile insurance are mandatory, and the participant's costs are based on their choices. Life insurance is optional. For simplicity's sake, it is assumed that the employer provides medical coverage. The participants write a check for the total monthly insurance payment.

- UTILITIES - The participants write a check for the amount of the total monthly utility bill that corresponds to the type of housing that they selected and extras they wish to purchase.

- GROCERIES - Participants need to select the level of food purchases that most closely fits their personal preferences. The grocery cost is only for food purchased at the grocery store and prepared at home. The participants write a check for the total monthly grocery bill.

- CLOTHING - Choices are based on gross income level, and participants select the amount corresponding to their income level. A check is written for that amount, plus a set amount for laundry and dry cleaning.

- ENTERTAINMENT - Participants are offered many choices: concerts, eating out, professional sports events, etc. The check that is written is the total of the entertainment options selected.

- DECK OF CHANCE - This expenditure or income offers participants a view of how life can throw a curve ball when least expected. They choose a card from a large deck of "chances" that represent some of the unexpected expenses and income often encountered in daily adult life. For example, "You received a speeding ticket, pay $75;" "You had an accident and have to pay the $250 deductible;" "A friend takes you out to eat, add $10 to your account." After drawing a card, the participants either write a check for the stated amount or add the amount to their checking account.

There are four options to present "Welcome to the Real World!"

Option I - Three hour one-day presentation that covers:

- Use Fact Sheets**
- Considering Careers and Decision Making
- Welcome to the Real World!" Simulation
- Processing the Simulation
- Enroll participants*

Option 2 - Three one hour sessions that cover:

- Use Fact Sheets **
- Considering Careers and Decision Making
- Welcome to the Real World!" Simulation
- Processing the Simulation
- Enroll participants*

Option 3 - Six one hour sessions that cover:

- Use Fact Sheets**
- Considering Careers
- Planning for Your Career
- Paying Yourself First and Paying With Checks
- Welcome to the Real World!" Simulation - Sections 1-4
- Welcome to the Real World!" Simulation - Sections 5-8
- Process the Experience and Spending Plan
- Enroll participants*

Option 4 -Nine one hour sessions that covers:

- Use Fact Sheets**
- Deciding What's Important and Making Your Decisions Count!
- Considering Careers and Making Money
- Planning For Your Career
- Managing Your Risks
- Spending Your Money and Using Credit
- Paying Yourself First and Paying With Checks
- Writing Checks
- Making Checking Account Deposits
- Balancing Your Checkbook
- Welcome to the Real World!" Simulation - Sections 1-4
- Welcome to the Real World!" Simulation - Sections 5-8
- Process the Experience and Spending Plan
- Enroll participants*

*Participants are requested to complete an enrollment form so that the Illinois Extension Service can collect data regarding the outcomes of students' experiences with the program.

**Fact Sheets are available in the program materials.

Results

Thousands of high school students throughout Illinois have completed this simulation. The most frequent student comments are:

- *I did not have enough money to meet my expenses.*
- All my expenses cost more than I ever really thought!
- It makes me want to save just in case of unexpected incidents.
- It helped me learn how to balance my money more.
- I realize that I definitely need a college education to live good.

When the simulation is completed, some students finish with a positive checking account balance, while others have a negative balance. Participants begin to understand that in real life, a negative balance (overdrawn account) is not permitted! One of the most critical components of this simulation is the participant evaluation of how well they spent their money. If they had a negative balance, they consider their choices and discuss what alternatives might be taken. Alternatives might include:

- Selecting a different occupation
- Getting more education/training, thus improving earning potential
- Balancing expenses to income by:
    - Making wiser consumer/lifestyle choices
    - Developing a realistic spending plan

Teachers have had a very enthusiastic response to the use of this simulation. They indicate that besides the excellent student outcomes, the simulation offers adaptable formats for ease of use with a variety of school scheduling patterns and with several age groups. In addition, the materials provided by the Illinois Extension Service via Phliebyeknight, Inc., are excellent in that they are well organized and easily duplicated for use. Furthermore, teachers indicate that this simulation has allowed them to build better partnerships with local business professionals who act as advisors before, during, and after the simulation.

Who should I contact for more information?

The "Welcome to Real World!" program was developed by the University of Illinois Extension Service, College of Agriculture, Consumer and Environmental Sciences, University of Illinois at Urbana-Champaign, Illinois. A complete Instructor's Handbook is available for $40 from Phliebyeknight, Inc., (a school-based enterprise of the Graphic Arts Department at Morton High School), Morton High School, 350 N. Illinois Street, Morton, IL 61550-2299.

The author would like to thank the University of Illinois Extension Service and Phliebyeknight, Inc., for their permission to prepare this article and for their assistance in helping prepare students for the real world of adulthood.

Enticing Students to Prepare For and to Stay "Engaged" During Class Presentations/Discussions

Zane K. Quible

Area Needing Improvement

With the advent of a wide array of instructional technology and relevant software (Internet, PowerPoint, etc.), preparing a variety of new types of instructional materials has become much easier. Because these materials can be made readily available to students, primarily using the Internet (and specifically the World Wide Web), they can bring printouts of these materials with them to the class periods in which the information is presented/discussed. However, this often causes students to be less "engaged" in the in-class learning process than they used to be when overhead transparencies were commonly used, the content of which was not generally shared with students as a handout. During this time, students felt compelled to take fairly detailed notes, often asking instructors to slow down, to keep the transparency on the projector a little longer, or to repeat what was just said.

Suggested Idea

Students bring to class materials they access from the Internet. A change in course procedures, however, keeps them "engaged" during the presentation/discussion of the material. It also entices them to read the assigned textbook material before it is presented/discussed, which provides greater reinforcement of their learning. The suggestion is to "offer" students the opportunity to take extra-credit quizzes.

Procedures

To keep students "engaged" in the learning process during presentations/discussions of material electronically available prior to class, a series of extra-credit quizzes have been added to the course that can help but not hurt students' grades. These extra-credit quizzes are used in lieu of the fairly frequent "scaling" or "curving" of students' hour-exam grades. Now, rather than simply giving students an "X" number of points to increase their exam scores, students earn these additional points through extra-credit quizzes given at the end of the hour.

Some teachers base a portion of students' grades on attendance, a practice that requires extremely accurate roll-taking procedures. These extra-credit quizzes eliminate the need to take time for attendance because the points are for the quizzes, rather than attendance. The quizzes also cause students to avoid scheduling appointments that require their having to leave class early.

These voluntary extra-credit quizzes are administered a few minutes before the end of the class period. They generally are comprised of true-false and multiple-choice questions from both the assigned textbook reading for that class period as well as from the material presented during the presentation/discussion. Students are encouraged to access on the server, and subsequently print before they come to class the PowerPoint slides to be used during that class period. An additional handout that contains a variety of sample sentences/paragraphs relevant to that day's discussion is also required. Before uploading the PowerPoint files to the server, a small amount of the content from a number of slides in each presentation is deleted. This is done to keep the students more "engaged" during the presentation/discussion, as they will need to determine which slides are missing content they will need.

Questions are from both the assigned textbook reading and the material presented so that students read the textbook material before they come to class. Because they know they are likely to have an opportunity to earn extra-credit points from the material presented/discussed, they stay more focused on what is being said and are also improving their listenting/recall skills in the process.

Among the guidelines used with this process are the following:

1. Tell students to be prepared for an extra-credit quiz (although they may opt not to take the quiz) for each class period that they are assigned to read a textbook chapter with a presentation/discussion of related material.

2. Inform students that the questions may be of true-false, multiple-choice, or even short-answer format. (Objective, quickly graded quizzes are preferable to subjective quizzes that take longer to grade.)

3. Extra-credit quizzes are not given at the end of every class period, but students need to be prepared for such an event. Generally, the number of points that an hour exam would contain determines the number of questions on each quiz.

4. There is no makeup of missed extra-credit quizzes. Because a missed quiz cannot hurt a student's grade, there is no need for a makeup. Also, the logistics of providing opportunities for makeup can become quite burdensome.

5. Extra-credit quizzes generally are comprised of 2-5 questions, some of which come from both the assigned reading and the material presented during that class period. In most cases, the questions that come from the presentation/discussion can be found on the PowerPoint slide printout although they do not necessarily have to be. This seems to entice students to listen very intently to what is said.

6. Generally, three different versions of each quiz are handed out in an alternating pattern. This removes the temptation for collusion. Also, the quizzes are different each semester so that students who might have an "old" quiz won't have an opportunity to earn a perfect score without having prepared for the quiz.

Results

Because students are always interested in extra-credit opportunities, they readily accept this process. In fact, on days when extra-credit quizzes were not given, some students expressed their desire to have one. This same attitude was not prevalent years ago when either announced or unannounced quizzes were used that comprised part of the grading scale.

Giving students extra-credit quizzes is seen as a positive rather than a "punitive" action. It is refreshing that students are generally able to answer questions over the material they were assigned to read for each class period. Also, they pay closer attention to what is said during presentations/discussions, and they are not waiting until the night before an hour exam to obtain a printout of the materials accessible on the Internet.

Students seem to appreciate the fact that they have an enticement to stay more engaged and focused during presentations, as well as they now have a good reason to read the assigned textbook chapter prior to a day or two before an hour exam.

Finally, students appreciate this process because it cannot hurt them when they absolutely do not have time to prepare to take an extra-credit quiz.

Suggestions

Although this process has been used only in a business communication course, it should work equally well in any course in which instructors want the following: (a) a positive rather than a punitive process, (b) students to read assigned material before they discuss it, (c) students to stay "engaged" and focused during the class presentations/discussions. Instructors will need to make classroom material available to students prior to their covering it in class via the Internet or some other means.

Group Project on Creating an E-Commerce Site

Dr. Diane C. Davis and Mr. Martin Hebel

Area Needing Improvement

There are many different content areas involved in a business education/information systems curriculum as well as many methods of teaching and presenting the subject matter. While the content and method of instruction vary, there seems to be a constant need to incorporate a culminating project that helps students to develop thinking and problem-solving skills and to demonstrate higher level cognitive skills by applying the knowledge learned. Educators also need to provide an opportunity for students to learn to work together as teams as they will be required to do in the workplace. This idea of developing an e-commerce site is just one example of a class project that helps to provide some of the opportunities to develop these skills.

Suggested Idea

The activity involves developing an e-commerce site for the sale and support of goods or services. In an Information Systems curriculum, this ties together much of the technical subject matter, such as web page design; database development; and use of OBDC, SQL, active server pages, and Perl. Beyond the technical matter, the web site involves business strategies, graphic design, teamwork, creativity, problem solving, and many other skills and competencies identified in the U.S. Secretary of Labor's report: Learning a Living: A Blueprint for High Performance: A SCANS Report for America 2000.

The students in the class are divided into teams and assigned a piece of the overall package, such as graphics design or database development. When all team members perform their share and work together, a comprehensive web site can evolve.

The project can be used in a variety of business-related programs and courses including many Information Systems or Information Technologies courses. It may also be adapted to other programs of study to increase subject matter and business awareness. The project as presented here focuses on using it in an Information Systems curriculum but it may be adjusted for other types of curricula (see Suggestions).

Procedure

The students are given an interest/knowledge survey that gathers information to assist the instructor in making team assignments. Each team needs to have a leader that has some experience in some of the software being used as well as basic leadership skills. Once teams are assigned, some class time can be devoted to this class project; however, most of the work can be done outside of class time if desired. The procedures are as follows:

1. Develop a "Policies and Procedures Handbook" for the students which provides a description of the project including such items as the purpose, the structure, the resources needed, and the grading plan (see Exhibit A for an abbreviated version). This should also include a specific listing of the teams and the responsibilities of each team and/or the specific pages that should be developed by the teams, such as: (a) welcome page, (b) company information page with mission statement, (c) registration page for customers, (d) product page that provides a detailed description of each product or service offered, (e) order form which lists all products, (f) an "About our Company" page, and (g) company benefits page for internal company use. The number of pages and extensiveness of the "handbook" will depend on the number of students in the class, their level of expertise, and the time devoted to the project.

2. Determine the teams and assign responsibilities to each team. This will also depend on the number of students and the extensiveness of the project. Typical team areas include: Project Management/Server Administration, Graphics, Product Development, Sales and Customer Support, and Database.

3. Provide a demonstration (if necessary) of the main type of software that will be used for the creation of the web pages; some examples include FrontPage and Dreamweaver.

This activity may be in a web-page design class that provides instruction using a specific software program or it may be in a class that does not focus on web design at all. Either way, due to the explosion of student interest in this area, there should be at least a couple of students who know how to use the software available and can teach the other students. If not, some class time can be devoted to basic instruction on how to use the software or students can be required to learn on their own outside of class.

4. Provide class time for the students to brainstorm and determine the type of company they wish to develop and the type of e-commerce site they wish to create.

Some examples might be: (a) a computer manufacturer or retailer that sells computer components online, (b) a bookstore that sells books online—these could be books required by the students in the department in which they are majoring, or (c) a consulting company that provides training for various information systems/ technologies certifications. (These are the sites created by students of the authors over the past two years.)

5. Schedule a meeting of group managers (server administrators) with team leaders to make sure the leaders know what is expected before they begin to meet with their individual teams. At this point, the class will have an idea as to the type of business and type of e-commerce site they wish to create, so they can then discuss with the instructor the responsibilities of each team. It is essential that these students feel comfortable with their assignments before the entire class begins to tackle the project.

6. Provide additional class time as necessary to get the project going and then for the teams to have an opportunity occasionally to communicate as a whole. Otherwise, the majority of the work can be done outside of class time.

Results

The result of the activity will be an e-commerce site that can be viewed by individuals on the Internet who have the address of the site/server. Of course, the students need to be aware that they should put a disclaimer on all pages of their web site to explain that it is just a class project and that no products or services can actually be acquired.

If the class has the expertise to tie the databases to the registration and/or order forms, then the web site can demonstrate to students how a company can gather information from the forms that will go directly into their database. This will include feedback pages which provide information to the customers once they register with the company and/or when they place an order with the company. It may also include text pages that list the customers registered and products or services ordered.

Once again, this project can demonstrate the entire process involved in creating an e-commerce site which includes creating basic web pages, designing forms that gather input, and developing databases that store information. It provides students with experience in decision-making activities, problem solving, teamwork, time management, and other thinking skills.

Suggestions

The depth and breadth of the project is dependent on the nature of the curriculum for which it is used. An intensive program of study in databases may expand on those areas, or a program with very little database matter may completely omit the use of databases. E-commerce web sites come in a wide variety of formats, from on-line shopping carts and purchases to simple product awareness. The site developed for this project can focus in those areas which would best suit the course in which it is used.

Web page or web site development is becoming as easy as using a word processor. High level packages such as FrontPage or Dreamweaver can quickly be used by novices to create professional looking pages. Additionally, most word processors will export as HTML for web page design.

Many schools have the equipment to host the project web site; but even if not, it is a fairly simple matter to use a product such as Microsoft's Personal Web Server to host the pages on an office computer. Another course may be involved in configuring servers and the project may gain assistance from them.

Sample Handout for Explaining the Project to Students

The following (Exhibit A) provides an example of the handout that could be distributed to the students to explain the project. Due to space limitations, the specific responsibilities of each team have been omitted. They could be listed specifically to provide more information.

EXHIBIT A: SAMPLE "POLICIES AND PROCEDURES" HANDOUT

Project Description

Purpose - The purpose of the project is to develop a virtual company on the Internet which will sell products. Through this web site, customers will be able to order merchandise and review their information. Another area (optional) will be to create a company Intranet which will provide internal working information such as company sales, inventory, and employee benefits/information.

Structure - Class members will be appointed to teams responsible for various aspects of the web project. These areas include project management/server administration, graphics, product development, sales and customer support, database maintenance, etc. A listing of the team members and main responsibilities of each team will be provided.

Documentation - The teams will be responsible for assembling a document describing the project. Each team will be responsible for its section of the paper. To ensure a common structure, the project managers/server administrators will provide guidance for these sections and will write the introduction and conclusion; they will be responsible for editing the individual reports and compiling the final report.

Grading - The project itself should be completed by (date); the group reports are due on (date) to the project managers/server administrators; and the final report must be completed by the managers by (date).

Resources - Some of the resources available for developing the project are listed below and others are welcome:

1. Server: A Windows NT workstation running IIS. It is expected that over 95% of all development work will be performed through remote connections to this server.

2. Microsoft FrontPage (or other software). This is a web page authoring and site administration program from Microsoft.

3. (List other software and reference materials here.)

Web Pages and Layout of Site

Sales and Customer Support Web Area

This web area will focus on providing a form for customers to use to register with our company and/or for the purchase of our products. This area is our sales information and may provide additional support for the customer. Note: All pages must contain a readily seen disclaimer informing the visitor that this is only a class project! The following sections discuss the general essence of the pages that should be designed for our customers.

Welcome Page. This will be the index page for this web area. It will normally be the first page a customer hits. While there are no special requirements for this page, it should be designed to draw further interest from the browsing person while not overwhelming him.

Company Highlights/Mission Statement. This page should reflect the culture of the company through a discussion of the company, the company mission statement, and general page layout. Let this page answer the question: "Why should I buy from your company?"

Products Available for Sale. This web area will focus on the products (or services) our company sells. It is designed to attract customers to our products sold online. It should be very appealing to the eye and provide all the necessary information about each particular product. These pages are the heart of the company—to sell the company's products on line. Each item should have a colorful picture and a detailed description.

Customer Order Form. Through this page, customers will place orders for the items they desire. These orders may then be placed into or transferred to the sales database. A customer database may be developed that would be updated from this information.

Company Intranet Web Area

This will be an area for internal company use. The Intranet area will provide information on the current state of the company. It may include such items as: (a) staff listing (information and/or pictures of all students in the class with e-mail links), (b) company policies and/or benefits, (c) current inventory (database linked), and (d) sales history (database linked).

Project Discussion Web Area

This web area will inform outsiders about the project. It will provide information on the goals of the project, the procedures followed to create it, the technology involved, and the participants. There may be an area where people can provide feedback on the project. This area could be broken down into the following pages: (a) project welcome page, (b) project discussion, (c) participants, and (d) feedback page (optional).

Teams

Project Management/Server Administration. Managers/server administrators will act as contact persons and as coordinators of the project. They will be assigned to individual teams.

Graphics and Project Discussion. This team will be responsible for creating the template or theme used for the web site. They will also create original artwork needed by the site and a company logo which should be used on all web pages by all other teams. They will develop the web area discussing the project for visitors to the web. This area will provide information on the project itself, the teams involved, how the project was accomplished, and possibly feedback from the visitors (optional).

Product Development. The students on this team will establish the main content of the product web page which describes and illustrates the products for sale by the company.

Sales and Customer Support. This team will provide a means so that customers can process and submit orders for products and view their purchase history and current status of shipments (optional).

Intranet. This team will develop the internal pages for the company. These pages will contain information such as the ability to see current inventory, staff lists (with e-mail addresses), and sales history.

Database Development. The database team will create and maintain the databases needed by the project. They will create active server pages and write SQL statements to put the data collected from the forms into the company databases (optional).

Identifying Global Business Opportunities

Les Dlabay

Area Needing Improvement

All students will be involved in the global economy as they work for organizations that import, export, or compete against companies that import or export. An awareness of global business opportunities will provide students with future academic preparation as well as career potential.

Suggested Idea

Some businesses attempt to expand their international operations by seeking foreign markets appropriate for existing products and services. Other enterprises assess foreign business environments in an attempt to meet needs in those markets. In this activity, the goal is to conduct an assessment of geographic, economic, social-cultural, and political-legal factors that create global business opportunities in foreign markets. Students should also consider how technology could create new foreign business opportunities by expanding possibilities for production, marketing, and distribution of goods and services.

Procedures

1. Have students work on their own (or in teams of two to four students). Assign students a country or have them select a country.

2. Students should conduct research about the country for the following topics:
   - Natural resources, agricultural products, or geographic factors (climate or terrain)
   - Level of economic development and infrastructure
   - Cutural characteristics, social activities, or demographic trends
   - Changing political situations or legal factors
   - Technology that may enhance production or distribution of an item

3. Based on their research, students should list possible global business opportunities that would be the basis for new or expanding international business operations in that country. These business opportunities may be consumer goods or services; or organizational goods and services, sold to businesses, government agencies, nonprofit organizations, schools, hospitals, hotels, or other organizations. (Examples of global business opportunities include: processing of fresh fruit in Chile for distribution around the world; sale of water filtration systems in developing economies; sale of food products adapted to the tastes of different cultures; development of cellular telephone systems in countries with a weak communication infrastructure; and expansion of fast-food restaurants into countries with expanding economies.)

4. The suggested global business idea should be documented with evidence regarding the foreign market potential (demographic, economic data) and a discussion of the benefits for both the company and the country.

Results

The benefits of this activity for students involve expanded awareness of global business activities and research procedures. Students may report the final outcomes of their efforts in one of several ways:
- A written report or portfolio with visual documents and other graphics
- A short oral report (3-5 minutes) with visuals
- A student-created video reporting the findings
- A newsletter or web site with a summary of key ideas

Suggestions

This activity could be adapted for use in any course in which a global business assignment or unit is desired. Most appropriate are: Introduction to Business, Marketing, Entrepreneurship, and International Business courses.

In addition to library reference materials, the following web sites may be useful for country information and global business activities:

- Asian country information at http://asnic.utexas.edu
- Eastern European country information at http://reenic.utexas.edu
- Latin American country information at http://www.lanic.utexas.edu
- Middle East country information at http://menic.utexas.edu
- Current country information at http://yahoo.com/regional/countries
- World Factbook at http://www.odci.gov/cia/publications/factbook/index.html
- State Department Country Notes at ww.state.gov/www/background_notes/index.html
- International Trade Administration at http://www.ita.doc.gov
- U.S. Trade Center http://usatc.doc.gov and www.usatrade.gov
- World Trade Centers Association http://www.wtca.org
- Global Business Web at www.gbw.net
- Federation of International Trade Associations http://www.fita.org
- Small Business Administration at www.sba.org
- Embassy information at www.embpage.org; www.embassy.org/embassies/index.html

Looking Beyond the First Job or Career

Jean Mausehund

Area Needing Improvement

During a typical college career, business students receive instruction on how to write resumes, network for leads, and interview for that first job when they leave the university. However, not many are taught what to do when that first job turns into a memory. Whether by choice or by other factors, people can expect to be in the job market five or more times in their adult lives (Kleiman, 1994). Those who choose to leave may only need to draw on what they learned in school, but those who find themselves fired or downsized face a process much like the stages of grief (Joravsky, 1992).

Suggested Ideas

Students may benefit by considering career movements that do not always include the traditional upward career ladder within a company or even in the same profession. They need to learn that even qualified people are often faced with career or job change. These changes may be brought on by factors within or beyond their control. Sometimes people accept a job only to find they do not fit into the corporate culture, dislike the work, or the work is beyond their current capacity. In other cases, whether it be euphemistically called "downsizing" or "out placed," workers find themselves confronting the bitter fact they have been fired. In this case, people face searching for a job and, at the same time, overcoming the psychological factors associated with unemployment.

Procedures

This topic has been included in such courses as Seminar in Business Communication for MBA students and business communication and administrative communication for undergraduates. An observation is that students relate quickly to units on gaining employment, but few want to relate to the other side of being hired—that of being fired. However, once the topic is openly discussed, students will often volunteer information about losing a job during their early years. Usually, these experiences have little lasting impact on self-esteem because of the low wages involved or the impermanence of the job in the first place. Building on these experiences then is the goal for the activities involved in learning about career changes be they voluntary or involuntary.

For the introductory exercise, students are divided into five groups. All groups receive copies of the introduction to the article, "A Kind of Death," from the Chicago Tribune Magazine and each group receives one of the five personal cases of people—some highly placed—who were fired. These stories include those of a coach of the Indiana Pacers, an executive vice president, a TV sports announcer, a superintendent of Chicago Public Schools, and a flight attendant. When reading the cases, students learn that these people did not lose their jobs ". . . because of illegal or incompetent behavior . . . [but] because of a boss's whim, a bankrupt company, . . . [reasons] beyond their control" (Joravsky 1991). Even so, the common themes the people relate are the personal hurt they felt and the battle to get on with their lives.

After the students read the introduction and the case for their group, the members of the group discuss the issues involved: (a) the hard fact of being fired; and as in some cases mentioned, the firing took place on already emotionally strenuous days such as Christmas or the person's birthday; (b) how the people reported the effects of being fired on their self-worth or other mental attitudes, and (c) how they faced rebuilding their lives and careers. Then each group has the opportunity to share with the class what the members discussed

about their case and hear the cases from the other groups. During the full-class discussion, students tend to open up about their own loss of a major job or someone in their family going through the process.

The next activities the class undertakes are looking at factors related to changing jobs or careers either by choice or necessity. These include self-scoring tests on job satisfaction or career choices (Kleiman, 1994) and ways to evaluate job security (Marion, 1993; Stetson, 1995). For those who choose to make the change, skills used in past job searches usually need only updating to meet the current job market climate. For those who are undertaking the search while working through the pain of involuntary severance, the route usually takes more effort—both mental and physical.

The harshest period of white collar unemployment occurred early in the 1990s; but in today's booming economy, the issue of employment receives little attention. However, the trend of mergers and acquisitions continued in the U.S. at the rate of one merger an hour for the years 1998 and 1999 (Sugawara, 1999). Almost invariably, mergers lead to adjustments in the number of employees. In many cases, other factors affect employment satisfaction such as changed corporate climate, forced retirements, fewer advancement opportunities, or decreasing benefits. Whatever the cause of unemployment, workers face going into interviews with the knowledge they may be called on to answer some form of the question, "Have you ever been fired?"

To address these issues, the class reads through two U.S. News & World Report featured articles on the process of managerial unemployment. The students review the phenomenon of executive unemployment that erupted in the late 1980s. Through the major part of the article "You're Fired!" they read about the shock, the length of unemployment, the necessary changes in lifestyle, the accompanying health problems, and the need for flexibility reported by fired workers (Brophy, 1987). However, they do not read only bleak news in Brophy's article. They also read alternatives for the newly unemployed mid- or upper-management worker. The major alternative for many ex-managers was to venture into self-employment or entrepreneurial endeavors.

The third reading, "When the Anger Fades: Tips for Starting Over," (McGrath, 1987) is then distributed. This reading includes practical tips for the person who faces forced retirement, downsizing, beginning a new career, or starting a business. Topics include tax implications for retirement, finances of retirement, financing an entrepreneurial venture, and gaining support of family and friends. Students are encouraged to speculate what choices they would make should they face one of these choices in their working lives. For students who work as managers or other positions where they may be in charge of hiring and firing, keeping human factors in mind may be an important factor in their own job satisfaction and self-worth.

Going Online for Extended Topics

Should the course allow for extended research on the topic, students can go online to research personal stories, pages dedicated to legal issues related to firing employees or being fired, hints for looking for work after being fired, and how to handle the issue of being fired in subsequent job interviews. As for most topics, resources online quickly jump into the thousands of possible sites. Therefore, students may choose general topics individually or specific topics could be assigned for each group. Students would then write the results in formal or informal reports and give oral presentations for the class to discuss further.

Suggestions

In addition to business communications, students in such courses as human relations and personnel management would benefit from the topic. Human resource management students anticipate hiring people for the company, but few may think about the other side—having to fire employees for either poor work or because

of company cutbacks. The current trend is for companies to provide exit interviews and counseling for employees who are leaving for whatever reason (Wild, 1996). Therefore, students who have studied the psychological factors surrounding "firing" from the employee's viewpoint may find it easier to be empathetic to people.

A standard approach in career training is for students to practice mock interviews for getting a job. For the human resource course, students could conduct mock exit interviews. The scenarios would include situations such as the "downsized" employee, the job eliminated because of technology, personality conflicts, unsuitable behavior in the workplace, or even recreations of the cases read in the first part of the exercise.

Supplies

The only supplies needed are copies of the readings and the job satisfaction quizzes from The Career Coach (or other similar sources). If desired, the instructor may compile a resource file or reading list for career changes and development.

Suggested Resources

Bolles, R. N. (1999, August 8). How to deal with being fired." The Parachute Library: For Job Hunters and Career-Changers. Retrieved from the World Wide Web January 16, 2000: www.jobhuntersbible.com/ library/ hunters/ fired.html

Boyett, J. H. & Conn, H. P. (1991). Workplace 2000. New York: Plume Books.

Brophy, B. (1987, March 23). You're fired! U.S. News & World Report, 50-54.

Challenger, J. E. (1999, November 9). Getting fired may be best alternative. Chicago Sun-Times, Retrieved from the World Wide Web: www.suntimes.com/output/challenger/22chall.html

Culp, M. L. (1999, November 7). Bad practices at work? Leave while economy's good. Los Angeles Daily News.

Frank, W. S. (1999, November 9). Fired HR director rebounds with two $100,000 job offers. Career Lab. Retrieved from the World Wide Web: www.careerlab.com/art_100koffers_a.htm

Horowitz, A. S. (1999) Unofficial Guide to Hiring and Firing People. New York: Macmillan.

Joravsky, B. (1992, February 9) A kind of death. Chicago Tribune Magazine.

Kleiman, C. (1994). The Career Coach. Chicago: Dearborn Financial Publishing, Inc.

Lichtenberg, R. (1999, November 13). You've been fired: Ten tips for bouncing back. Oxygen Ka-Ching Your Career Experts. Retrieved from the World Wide Web January 16, 2000: www.ka-ching.com/ career/column/onthejob/yc_ column_onthejob01

Marion, P. (1993, May/June). How secure is your job? Executive Female, 43-44.

McGrath, A. (1987, March 23). When the anger fades. U.S. News & World Report, 57.

Sach, S. M. (1999). Getting Fired. New York: Warner Books.

Smith, L. (1993, March/April). When you're out of work. Executive Female, 55.

Stetson, N. (1995, July 2). 7-point program: Even if you're no longer on your way up, make sure you're not on the way out. Chicago Tribune, 8-1.

Sugawara, S. (1999, December 31). Year's end caps merger decade. Northwest Herald, 1.

Wild, R. (1996). Business Briefs. Princeton, NJ: Peterson's/Pacesetter Books.

Works Cited

Brophy, B. (1987, March 23). You're Fired! U.S. News & World Report, 50-54.

Joravsky, B. (1992, February 9). A Kind of Death. Chicago Tribune Magazine.

Kleiman, C. (1994). The Career Coach. Chicago: Dearborn Financial Publishing, Inc.

Marion, P. (1993, May/June). How secure is your job? Executive Female, 43-44.

McGrath, A. (1987, March 23). When the anger fades. U.S. News & World Report. 55-57.

Stetson, N. (1995, July 2). 7-point program: Even if you're no longer on your way up, make sure you're not on the way out. Chicago Tribune, 8-1.

Sugawara, S. (1999, December 31). Year's end caps merger decade. Northwest Herald, 1.

Wild, R. (1996). Business Briefs. Princeton, NJ: Peterson's/Pacesetter Books.

Making A Group Work Project A Successful Experience

Marilyn R. Chalupa

Area Needing Improvement

Often, students form groups of at least three members to complete projects. Whether the group membership is formed voluntarily or by assignment, the most frequent problem continues to be one or two people do all the work.

Suggested Idea

To eliminate or minimize the problem of some group members not fulfilling their responsibilities, the following could be included as a part of the group project assignment: (a) Common Ground Rules When Meeting, (b) Tentative Plan, (c) Group Members' Responsibilities, and (d) an article about "Resolving Small Group Conflicts" (Weber, 1997). Commitment and involvement of each group member is now more critical for successful completion of the project.

Procedures

After the group project assignment has been explained, briefly discuss the advantages of the Common Ground Rules When Meeting. The five rules include: (a) Stay focused, (b) Listen to each other, (c) Ask questions, (d) Be open to new ideas, and (e) Be on time. Each group member signs off agreeing to these rules. In some situations, the groups may discuss and make modifications to the rules before signing. Students are required to maintain a folder that becomes a chronological history of the activities pertaining to the project.

The purpose of the second handout, Tentative Plan, is explained. In each group, the members discuss this plan and modify accordingly. This basically becomes the Plan of Work for each group. Each member has a copy of the Plan of Work and a copy is given to the instructor to keep in the group's file. The Plan of Work can be turned in within two weeks of assigning the project or by whatever date is determined. Each group starts with the following tentative plan:

1. What can you do as a whole team?

2. What activities are dependent on completion of another activity or activities?

3. Who will do what?

4. Plan a time line to complete the project.

5. Plan the format of the report.
   Software to be used
   Layout of report
   Parts: Title page, Table of Contents, etc.

The third handout, Group Members' Responsibilities (Group Projects, 1997), lists four roles and relating responsibilities. The group prepares a memo to the instructor indicating who has accepted each role. The four roles and relating responsibilities include:

Discussion Leader: Keeps group on task by developing an agenda and using it to structure meetings.

Recorder: Keeps minutes of each meeting (paying particular attention to work assigned to members) and distributes a copy of the record to the group members. Keeps this information in a folder with each meeting dated.

Meeting Coordinator: Identifies regular meeting times and location and reminds each group member. Keeps track of attendance at meetings.

Intermediary: Must periodically meet with instructor to report on the group's progress and indicate any changes in the Plan of Work. Prepares a progress report at requested time intervals.

The fourth handout is a short article titled "Resolving Small Group Conflicts" (Weber, 1997). This handout is discussed later in the project. If any problem occurs, the group is encouraged to meet to resolve the problem; the instructor intervenes only after their attempts to resolve the problem have failed or if specifically requested.

Upon completion of the group project, each group member completes a confidential peer evaluation. Students are asked to be objective, honest, and fair in completing this evaluation. Questions include: (a) Who in the group did you consider to be the leader and why? (b) Who in the group did you consider to contribute the most? (c) Who in the group did you consider to contribute the least? (d) What responsibilities did you have? (e) What did you learn about group work? (f) What human problem(s) did your group encounter? The last question asks the students to rate each member (including self) based on contribution using the following scale:

10 —Did all of the work
9 —Above average contribution (a lot)
8 —Average contribution
7 —Below average contribution (somewhat)
6 —Considerably below average contribution (very little)
0 —No contribution

Students must reflect about their answers to these six questions to objectively and fairly evaluate each group member. This average rating is a separate grade.

Results

The Common Ground Rules help the students stay on task when in their group meetings. Signing the Ground Rules is similar to signing a contract in that one agrees to do these things. Some students indicated that by signing the rules they were more committed to the project than when signing was not required.

The Tentative Plan is really the starting point for the group to begin their sharing of ideas, listening to one another, asking questions, and staying focused on the task as they plan how to proceed. To complete this Plan of Work, at least two or three meetings are necessary, depending on time allotted.

The Group Members' Responsibilities requires members to be dependent on one another. With each person having a role, attendance at the group meetings was not much of a problem. Keeping minutes required them to stay focused on the task. Keeping attendance provided visible proof of who was and wasn't participating. Notifying members of a group meeting eliminated the frequent excuse of "I didn't know." Preparing a progress report that was positive and results oriented required fulfillment of the other three roles. If a group consisted of three members, recorder and coordinator were combined.

The article about group conflict gave the students strategies to resolve problems positively. The article stresses the value of listening, defining responsibilities, and valuing each person's gifts.

The Confidential Peer Evaluation gives students the opportunity to try to be objective and fair in evaluating colleagues. The evaluation is completed in class on the day the project is due. Students can refer to their chronological file to review their notes while completing the evaluation. These files are also turned in with the completed project. Based on their responses to the prior six questions, students found it was not so easy to assign a number to determine contribution.

Suggestions

This approach was used for an Ergonomics project in Introduction to Business Information Technology. Each group consisted of three or four members. Each group had a case scenario to address hardware, software, and ergonomic issues for a department/division in a company, a training room, or a classroom lab.

The final report had specific requirements, thus again requiring group members to support one another, constructively critique the writing, and work closely to put all the report parts together. A group presentation may also be required.

The Plan of Work was valuable, especially planning the format of the report. Comments from the students indicated that visualizing the finished product made it easier for each to type some portion of the document and yet put it all together in one file on one disk. They felt it was a realistic group effort.

By implementing ground rules, developing a plan of work, having a role for each member, and discussing group conflict, all members participated more fully in the project and each member felt more committed to the group.

References

Group projects: Problems and possible solutions (February 1997), The Teaching Professor,11(2) 5.

Weber, E. (February, 1997). Resolving small group conflicts, *The Teaching Professor, 11*(2), 4.

Making Keyboarding Fun

J. Rebecca Holcomb

Area Needing Improvement

The phrase most often voiced from keyboarding students is "keyboarding is boring, when are we going to do something fun?" As teachers this is a dilemma we have to overcome. How do we teach students needed skills and still make keyboarding fun? One area that needs more attention in keyboarding is composing at the keyboard. Often these students acquire "button pushing" skills rather than concepts, applications, and integration of the concepts and applications. They often lack knowledge of office procedures, records management, and general office skills (VanHuss, 1997).

Suggested Idea

Students brainstorm an idea about a story at the computer. They will be allotted a certain amount of time to invent an appropriate story beginning. Another idea is that the teacher provides a beginning sentence and have the students continue from there. After the allotted time to think of an idea, students will transfer their idea to the computer. Students will be given a certain amount of time to key their stories, say 10 minutes. After the time has expired, the students will then move to another computer. There they will read the story on the screen. Next, they will make any needed corrections to the original story such as spelling, formatting, etc. After they have proofed the story, they will add to the original story. Each student will be given the same amount of time to continue the story.

Depending on the amount of time devoted to this activity, three to five students will work on a story. Not all students will have the opportunity to work on everyone's story. At the end of the hour, students will print and share their stories with the class.

Results

Students will have to use their creative thinking and apply their proofreading skills to complete this activity. These stories provide students opportunities to compose at the keyboard without keying material straight from a book.

This activity broke up the everyday monotony of typing drills and activities from the textbook. Students enjoyed this activity and wanted more time to continue their stories.

Suggestions

This is an activity that can be implemented on an early out day or used at the end of the week.

Reference

This idea was presented by Mrs. Tally, Logan-Rogersville High School.

VanHuss, S. H. (1997, December). Integrated application keeps keyboarding alive and well. Business Education Forum, 30-32.

Making Students Responsible for Learning

Dianna Briggs

Area Needing Improvement

Many times students come to class and expect the teacher to tell them what they need to know. Too frequently, the students will then memorize what they need to know for the test, only to promptly forget most of it. Students too often fail to understand the relevance or the interrelatedness of the concepts or topics covered.

Suggested Idea

If the students determine the course content based on what they want to learn, they will take more responsibility for their own learning, and, therefore, not only learn more during the class but understand the importance of the material as well.

Procedures

On the first day of class, students were given only an outline of expectations, grading, and information that did not directly relate to the content of the course. The students were then asked to share three or four things they wanted to learn in the course during the semester. They did this by writing each idea on a separate sticky note. (Four sticky notes were placed at each seat prior to class beginning. Also, four to six large sheets of newsprint were posted around the room.) In groups of five to seven, without talking, they put their notes on one of the large sheets of newsprint posted on the wall. Then, again without talking, they were asked to group their suggestions into categories. If they disagreed with where someone placed a sticky note, they were to move it to where they thought it should be. This continued until each group came to a general consensus. They were then given a marker and sticky notes for each category to label the topics. These sticky notes were a different color from the first ones used for ideas. For this part of the activity, they were allowed to discuss their ideas and to discover how each person approached the task as well as how each had labeled the category in his/her mind. (Langford, 1997).

During this process, students found that most of them had similar interests or content ideas they wanted to learn. The students also learned that although they had similar needs, they had varying approaches to their thinking. Every student had an equal opportunity to participate in a non-threatening environment. This opened the door to interesting discussion within the groups.

The groups then shared the topic areas they wanted to cover with the large group and found the similarities among the groups as well as among individuals. They were then told that these topics would be placed into a calendar for the course, reassuring that all topics would be included and given to them at the next class meeting. Additional suggestions would be accepted at any time.

One very important point to make at this time is that the instructor is a part of the class, too. Therefore, the instructor has the right to include up to four ideas/suggestions as well. This allows the opportunity to include an area the group may not think of (e.g., teamwork, ethics, problem solving, content specific areas, etc.)

All of the suggestions were then typed, combining all groups into a master list. The list was shared with the students to be sure nothing was omitted. In the next class meeting, the students were given the course calendar with assignments and full details for the remainder of the course. Throughout the course, as each content area

was covered, the items listed were crossed off the master list to be sure that all questions were answered and all issues were discussed.

To make the class even more student directed, students were given the information for some of the topics and asked to share what they learned from the material with the large group. Or, students were asked to seek out information on a topic to report back to the group. Not only did they select the topics, they were also responsible for finding the information to share with their classmates.

Results

The students were hesitant at first to believe that the course would really be structured around their requests/ interests. However, during each topic, the initial request was referenced at some time. This reminder helped the students to see the content as "provided upon request" rather than something predetermined by a text or instructor. The students did become far more interested in the course and took a more active role in each class session. They began to answer their own questions and become more responsible for their own learning.

This can be an uncomfortable activity for teachers who want to walk into a classroom and hand out a class syllabus complete with everything predetermined for the course according to a text. However, having done this activity for three semesters, the interesting discovery is that students repeatedly asked for most of what would have been covered using a textbook as a guide. The big difference is that the course calendar is set up according to the importance of topics rather than according to a textbook. This has a definite impact on the use of textbooks. Starting with chapter one and working through sequentially for the semester undermines this whole process. Students need to see topics chosen according to their requests. The text needs to become a supplemental resource for the class, providing information and activities, rather than being the driving force for the content. Additionally, using multiple textbooks as resources rather than one allows students to observe the importance of relying on more than one source for information. Instructors can model the importance of weighing varying opinions and considering multiple factors in each situation.

Suggestions

This activity could be used for almost any curricular area or unit within a course. This information was based on a business communications course at the university level, but it could be used for any course at any level. It has worked well for a human relations course. After sharing this in workshops for business teachers in Iowa, it was used at the secondary level in a computer applications course and in a general business course with very good results.

The only supplies needed are the sticky notes (three to four per student) for the ideas, different colored sticky notes for the topics, markers, newsprint or large tablet paper, and tape for posting the paper. If preferred, note cards could be used in place of the sticky notes and the cards could be put directly on the wall with tape or sticky putty rather than using the large tablet paper.

For those doing this activity for the first time, it would be wise to start with a topic or unit to be covered rather than course content. (In order to ask relevant questions, students must first be familiar with the topic.) For example, if you tell students that they are going to begin a unit on "XYZ" (something they have never heard of before) and ask what they want to know/learn, the response most students will give is: "What is it?" By giving a brief description of the topic or allowing students to explore the topic first, the students will be able to provide better questions and develop a higher level of interest.

To be successful, this activity depends on trust between the teacher and students. The best way to make the activity fail is to spend the time to gather the ideas and then proceed with a predetermined curriculum which does not address specifically what the students have requested. Or, ignoring some of the requests/issues provided by the students will tell the students that you really aren't interested in what they want to learn. The whole purpose of this activity is to have the students share what they really want to learn and make them responsible for their choices. In turn, this provides the teacher with a very important guide to curricular choices during the course.

References

http://cbpa.louisville.edu/bruce/singapore/facilitate/tsld013.htm

http://mijuno.larc.nasa.gov/dfc/snt/afindiag.html

http://mot.vuse.vanderbilt.edu/mt322/media3/affinity.htm

Langford, D. (1997). Tool time, choosing and implementing quality improvement tools. Langford International, Inc.

McClanahan, E. & Wicks, C. (1993). Future force, kids that want to can, and do! PACT Publishing, California.

Mizuno, S. (Ed.). (1988). Management for quality improvement: The 7 new QC tools. Cambridge, MA: Productivity Press, Inc.

Multiple Intelligences: Classroom Strategies

Thelma King

Area Needing Improvement

Within our global and mobile society, students enter classrooms with unique learning abilities. They are smart in different ways and, therefore, learn in different ways. For teachers, the same holds true. Effective teachers facilitate students' learning by providing highly engaging learning experiences that are motivating and challenging to the students. Such an effort often requires them to go outside of their comfort zone, to be willing to learn in different ways, and to be willing to try new strategies. As a result, students' attitudes and academic achievement often improve when learning experiences revolve around their interests, talents, and needs.

We need more effective teachers willing to go the extra mile. It is our responsibility to reach all students by developing their diverse learning styles using various teaching strategies and learning experiences.

The essential question: How can all teachers become ***EFFECTIVE*** teachers who reach all students and make their classes more student-centered?

Suggested Idea

Howard Gardner (1983) wrote a book entitled, Frames of Mind: The Theory of Multiple Intelligences (MI). He identified eight different ways people are considered smart and called them intelligences. They are logical-mathematical, linguistic, spatial, musical, bodily-kinesthetic, interpersonal, intrapersonal, and naturalist. Multiple intelligences is one way to celebrate the uniqueness and diversity of students. Some intelligences are more developed in individuals than others, but one does have the ability to develop each intelligence.
Teachers should constantly modify their method of presentation while combining the intelligences in creative ways. The attached table lists Gardner's MI along with characteristics of each. Gardner's theory has proven to be an effective way to engage all students in the learning process.
MI theory can be used as a guide to create lessons/unit plans that address students' strongest intelligences at least some of the time and also to enable the teacher to shape his/her underdeveloped intelligences.

Procedure

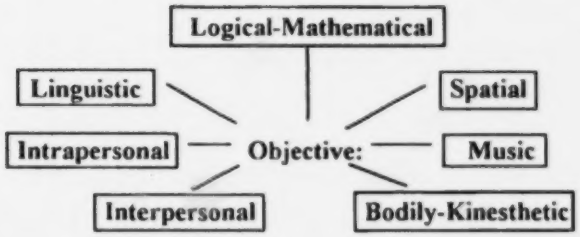
Armstrong (1994) suggest the following seven-step procedure for lesson/unit plan development:

1. **Focus on a specific objective or topic**—place clearly stated topic or objective in center of sheet of paper

2. **Ask Key MI questions**—How can I use visual aids, visualization, color, art, or metaphor? How can I bring in numbers, calculations, logic, classification, or critical thinking skills? How can I engage students in peer sharing, cooperative learning, or large group simulation? How can I evoke personal feelings or memories, or give students choices? How can I bring in music or environmental sounds, or set key points in a rhythmic or melodic framework?

3. **Consider the Possibilities**—select appropriate methods and materials

4. **Brainstorm**—use MI Planning Sheet to list as many teaching approaches as possible for each intelligence (see attached completed planning sheet)



5. **Select Appropriate Activities**—from planning sheet, circle approaches that seem the most feasible in your educational setting

6. **Set Up a Sequential Plan**—design lesson or unit plan using selected approaches

7. **Implement the Plan**—gather material, select time frame and carry out lesson plan

Gardner's (1983) MI theory tells us that intelligence is not fixed or unitary. We have the ability to develop our intellectual capacity. Everyone has each intelligence and a unique pattern of intelligences. Most people are highly developed in some intelligences, modestly in others, and underdeveloped in the rest. Gardner suggests that most people can develop each intelligence to an adequate level of competency. Factors that influence the development of intelligences are biological endowment (hereditary/ genetic factors), personal life history (experiences with parents, teachers, peers, friends, etc.), and cultural/historical background (including time/ place born and raised, cultural/historical developments).

First, teachers are strongly encouraged to take Thomas Armstrong's (1994) MI Inventory for Adults. It will give them an idea about their strengths and weaknesses. They will find that some intelligences are more developed than others. Second, teachers should administer Armstrong's Checklist for Assessing Students' Multiple Intelligences to students that they teach. The checklist will help teachers confirm other observations of students' multiple intelligences. Once teachers and students have taken the inventories, the teacher will be able to develop creative and dynamic lessons (using the seven step plan) that address several intelligences in each class. Teachers are able to include a broader range of methods, materials, and techniques for reaching a wider and more diverse range of students.

Results

The use of MI theory in the classroom enables teachers to go beyond the traditional linguistic or logical ways of instruction. The theory enables teachers to present lessons in a variety of ways so that all students have an opportunity to learn relative to their unique minds. The material is presented in a way to facilitate effective teaching/learning.

Suggestions

The ideas and strategies presented in this paper can be adapted and used in any educational discipline. One is limited only by his/her imagination in the use of Gardner's MI Theory to reach all students. Suggestions regarding the use of Gardner's MI theory are listed below.

1. When developing the lesson/unit plans, let the students assist with determining the materials to be used. You can be assured of using something from each intelligence because students will probably suggest items related to their most developed intelligence(s).

2. At the beginning of the school year or semester, discuss and explain Gardner's theory to the students. Request that students list activities/strategies that they would enjoy doing. Gather the list from each student and develop a class list of activities. Use the list throughout the semester to plan lessons.

3. The use of the MI theory is perfect for interdisciplinary endeavors with other teachers and students. Opportunities abound. Business teachers could easily integrate and/or relate their classes to others.

4. When using the traditional style of teaching, teachers can stimulate the multiple intelligences by
   a. lecturing with rhythmic emphasis (musical),
   b. drawing pictures on the board to illustrate points and using of graphic organizers to introduce/review material (spatial),
   c. making dramatic gestures when speaking (bodily-kinesthetic),
   d. pausing during a lecture to give students time to reflect (intrapersonal),
   e. asking questions that invite lively interaction among students (interpersonal).

5. Identify an instructional objective or skill that many students fail to master or find it difficult to understand and use the seven-step lesson plan process to generate lessons. Teach the lessons using the activities developed. Afterwards, allow yourself and the students time to reflect on the effectiveness of the lesson. What did you learn?

6. Look over the following MI table. Identify intelligence(s) that you have never or seldom focused on in your teaching. Develop a lesson or lesson(s) around the intelligence using some of the innovative materials and activities from the chart. How effective was the lesson? Did you reach your intended audience?

GARDNER'S MULTIPLE INTELLIGENCES

INTELLIGENCE	CHARACTERISTICS	TEACHING MATERIALS/ TECHNIQUES
Linguistic (word smart/verbal	•Learn through reading, writing, discussing •Communicate effectively •Have a good vocabulary •Write clearly •Speak easily •Think in words	lectures, group discussions, books, worksheets, manuals, writing activities, word games, sharing time, student speeches, talking books and cassettes, debates, choral reading, using word processors, desktop publishing, journal keeping, tape recording, brainstorming, storytelling
Logical-Mathematical (number/reasoning smart)	•Think in numbers, patterns, and algorithms •Think clearly and analytically •Learn by appeal to logic •Use abstract symbols •Solve logic problems easily •Excel at math	problems on board, logical problem-solving exercises, creating codes, logic puzzles and games, computer programming languages, logical-sequential presentation of subject matter, heuristics, quantifications and calculations, classifications and categorizations, Socratic questioning

continued

INTELLIGENCE	CHARACTERISTICS	TEACHING MATERIALS/ STRATEGIES
Spatial (art/space, picture smart)	•Think in pictures and images •Understand spatial relations •Have a good eye for detail and color •See solutions to problems •Learn through visuals •Like to draw and create	charts, graphs, diagrams, maps, photography, videos, slides, movies, visual puzzles and mazes, creative daydreaming, painting, collage, and other visual arts, visual thinking exercises, use of graphic organizers, computer graphics software, visual awareness activities, visualization, picture metaphors, idea sketching, graphic symbols
Bodily-Kinesthetic (body smart)	•Demonstrate good coordination •Use gestures and body language •Take things apart and fix them •Learn through "hands-on activities •Enjoy acting and role-playing •Enjoy dancing and athletics	creative movement, field trips, mime, competitive and cooperative games, hands-on activities, use of kinesthetic imagery, manipulatives, virtual reality software, use of gestures to communicate, tactile materials and experiences, hands-on thinking, classroom theater, body maps
Musical	•Have a good sense of rhythm and melody •Like to sing, hum, chant and rap •Enjoy listening to music •Read and write music •Learn through music and lyrics •Enjoy creating music	singing, humming, whistling, playing recorded music and live music, group singing, using background music, linking old tunes with concepts, creating new melodies for concepts, music software, rhythms, songs, raps, chants
Naturalistic (nature smart)	•Are aware of their natural surroundings •Discriminate different flora and fauna •Are good at sorting and classifying •Have keen observation skills •Understand natural phenomena •Garden or care for pets or animals	list characteristics, record changes/developmental stages, record or classify by color/size/ form/ function, use log or journal, devise classification system, sort and categorize nonnatural items, use graphic organizers
Interpersonal (people smart)	•Make and maintain friends easily •Understand and respect others •Lead and organize others •Resolve conflicts •Learn by interacting with others •Like to work and be with others	interpersonal interaction, conflict mediation, peer teaching, cross-age tutoring, group brainstorming sessions, community involvement, apprenticeships, academic clubs, interactive software, parties/social gatherings as context learning, cooperative groups, board games, simulations

continued

INTELLIGENCE	CHARACTERISTICS	TEACHING MATERIALS/ STRATEGIES
Intrapersonal (self smart)	•Need time to process information •Think about their own thinking •Have strong opinions and beliefs •Are introspective •Know themselves well •Like quiet time alone	independent study, self-paced instruction, individualized projects and games, private spaces for study, interest centers, options for homework, self-teaching programmed instruction, exposure to inspirational/ motivational curricula, self-esteem activities, journal keeping, one-minute reflection periods, choice time, goal-setting sessions

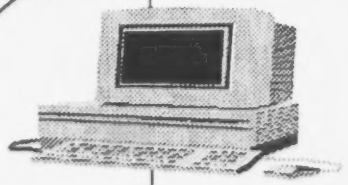
References

Armstrong, T. (1994). Multiple intelligences in the classroom. Alexandria, VA: Association for Supervision and Curriculum Development, ASCD.

Gardner, H. (1983). Frames of mind: The theory of multiple intelligences. New York: Basic Books.

MI PLANNING SHEET

BEST COPY AVAILABLE



Linguistic

Discuss ideas

Debate

Written explanations

Logical/Mathematical

Brainstorm

Compare/contrast

Classify & categorize

Spatial

Design poster

Create graphic organizers

Create collage

OBJECTIVE

Students will be able to distinguish the similarities and differences in MS Office applications.

Intrapersonal

Personal responses

Reflections

Relate to personal experiences

Musical

Compose melody/jingle

Compose chant

Musical mnemonic to remember

Interpersonal

Discuss with partner

Peer flash cards

Reach consensus

Naturalist

Categorize

Classify

Bodily-Kinesthetic

Depict concept with movement

Show using computer

Put together puzzle

Proactive Strategies for the 21st Century:
Incorporating Technology in the Classroom

Shelia Tucker

Area Needing Improvement

Arthur E. Wise, president of National Council for Accreditation of Teacher Education (NCATE) stated, "National policymakers want to see an improvement in student and teacher candidate ability to use computer technology. As technology moves from the periphery to the center in P-12 schools, it should also move from the periphery to the center in teacher candidate preparation. We must all work together to help ensure that tomorrow's teachers are prepared for the challenges of teaching in the 21st century." (NCATE, n.d.). NCATE recommended that technology be central to the teacher preparation process, and its year 2000 set of accreditation standards will undoubtedly raise the bar for the use of technology in teaching and learning in schools of education.

The business world, changes in the workplace, educational reform efforts at the state and federal levels, as well as developments in modern information technology, all place demands upon preparing students to effectively use technology. The NCATE report suggests that technology has changed the nature of work, the nature of communications, as well as an understanding of the development of knowledge. Teachers are encouraged to use a wide range of technological tools and software as part of their instructional repertoire. They are encouraged to help students make use of technologies to find, organize, and interpret information. "Teachers need an 'attitude' that is fearless in the use of technology, encourages them to take risks, and inspires them to become lifelong learners" (NCATE, n.d.).

Higher education as well as the world of work is permeated with technology. Students must be equipped with the confidence and skills needed in using this current technology as well as the technology that will be available in this new century. One avenue of helping students meet this challenge is to integrate technology into the classroom. Integrating the use of technology into activities that are a core part of the classroom curriculum helps prepare students by allowing them to explore different technological capabilities. This integration helps foster increased student motivation, student participation, student collaboration, student confidence, and student self-esteem. It helps increase interest in experimenting with emerging technology.

Suggested Idea

By incorporating the assimilation of technology into instructional activities within the class, students would be encouraged to pursue the use of technology within their learning activities.

Procedures

To promote assimilation of technology within the classroom, use various multimedia when teaching the course. When using PowerPoint, pause to demonstrate how a specific presentation was put together. Students were shown how the Internet was used to download pictures, sound, and motion clips, to insert them into my PowerPoint presentation. In addition, I brought a QuickCAM and MPEGCAM to class and demonstrated how they were used to take still pictures and streaming videos that can be incorporated into presentations. The use of Real Encoder and RealPlayer were demonstrated which showed students how to record their voices and have them play back within a presentation. They have been shown how to add slide transitions, effects, clip art, movie clips, sound, and animation to presentations.

Additionally, students were given the opportunity to contribute to the assimilation of technology applications within the classroom. This was accomplished by allowing them to demonstrate and/or discuss the technology they have used. One student might share how a video was created—taking excerpts from three or four different videos and using two VCRs to create one video to show the class. Another student might share how he/she used QuickCam to record real video, RealEncoder to record audio, and RealPlayer. Yet another student might share how he/she used the scanner to scan different pictures into a PowerPoint presentation. Pi Omega Pi students shared how they created their portfolios on a CD, which is a relatively new concept. They won first place in national competition for this effort. Additionally, students were encouraged to use e-mail as a form of communicating with one another and with me.

Results

Students were provided with an opportunity toward the end of the semester to incorporate technology into their learning process. Results far exceeded expectations. Students demonstrated higher-order skills such as problem-solving skills, critical-thinking skills, and decision-making skills. Confidence, self-esteem, and creative ability were evident. Motivation and class participation increased. A special bond seemed to develop between the teacher and the students. Students were encouraged to "go the extra mile." They were given the freedom to be as creative as they wanted to be in using technology. Thus, they took up the challenge to learn new technology and incorporate it in their activities. Students researched topics that are an important part of our society. They learned about important issues and ways of dealing with those issues. Additionally, they were able to use the internet to incorporate "real-world" situations via news video clips, clips of relevant television movies, and pictures of national headlines relevant to their topic of discussion.

Students said that they learned things from the class that will help them for the rest of their lives. They learned technology, techniques, and information that can be used not only in this class, but in other classes as well. They have discussed how they can apply what they have learned to situations in the world of work.

Suggestions

This activity can be used for almost any curricular area. It has been effectively used in Business Communications, Intro to Information Processing Technology, Administrative Office Procedures, and Administrative Management.

This author believes the statement, "teachers need an 'attitude' that is fearless in the use of technology" to be true. For those who know little about and are uncomfortable with using technology, the following strategies for learning new technology may be helpful. Teachers can learn to use technology by experimenting with it. Take a textbook and work through the problems. Ask questions and then experiment with things such as digital cameras, encoders, and Realplayer. During the course of instruction, if a student demonstrates some form of technology that is unfamiliar, ask him/her to demonstrate it.

Learning to use technology and incorporate it into the classroom is a two-way process. Students learn from the instructor, and the instructor learns from the students. The teacher must be comfortable enough and willing to allow students to take an active part in learning about technology in the classroom. It is important for the teacher to provide students with the opportunity to share their technological experiences with the class. By doing so, the teacher as well as the students, can benefit. It's ok to say, "I've learned something from my students today." This approach aids in obtaining their trust and respect. The students appear to become more unified, motivated, and enthusiastic. Students comment that technology is ever evolving and changing. They recognize the impact as well as the importance that technology plays in motivating them to be lifelong learners.

Reference

http://www.ncate.org/accred/projects/tech/tech-21.htm

Project Based Learning

Johnny Sue Bauer

Area Needing Improvement

Students learn software programs by using a process based on examples from the book or given criteria. They will often memorize the process to complete the work for assignments or assessment purposes without comprehending the actual purpose of the software. After completing a unit, students may comment that "they completed it, but they don't understand it."

Suggested Idea

If the students use software applications in a project that interests them, it will involve them in the comprehension of the software applications. They will be more inclined to explore and examine the potential effectiveness of a particular application. Giving students their choice of projects ensures that the project is relevant and meaningful to them (Wolk,1994).

Procedures

In the Advanced Computer Applications course, the content includes word processing, spreadsheet, database, publishing, presentation, and web page development software. During the word processing portion of the class, a project is introduced that the students will work on all semester in various phases. They are to create a business of their own choice—one that really interests them, in an area that they know well. They have about a week to determine what the business will be. The business must be legitimate and appropriate. These are real business opportunities that the students could pursue.

Listed below are the phases of the project including software and procedural information.

- ***Phase 1 – Word Processing.*** Students develop proposals that describe their business projects. They tell what their businesses will be, where they will be located, the purpose of their business, how many people they will employ, and the hours they will be open. This phase is completed at the end of the word processing portion of the course.

- ***Phase 2 - Spreadsheet.*** After completing the spreadsheet assignments, the students make spreadsheets and charts that can be implemented in their businesses. The spreadsheets must be useful to the businesses. They must provide financial functions that improve the efficiency of the businesses. Suggestions are budgets, inventories, and/or payroll. They also need to complete a half page summary that indicates the purpose of the spreadsheets, why they will improve the businesses, why they will be more efficient, and how they will benefit the businesses.

- ***Phase 3 - Publishing.*** The students are required to use publishing software to promote their businesses in any way they determine beneficial. They can create flyers, business cards, letterhead, advertisements, or anything they desire that would effectively promote their businesses.

- ***Phase 4 - Database.*** This portion requires the students to use a software to organize a database that will improve their businesses. They must create tables, queries, and reports. Suggested databases include personnel files, customer files, and supplier files. Again, they need to complete a half page summary that substantiates their work. They must explain what this particular database design will do for their busi-

nesses, why they chose the queries and what benefit they will provide to them, and the basis for the reports they create.

- ***Phase 5 – Presentations.*** This phase requires the students to create presentations that run continuously to promote their businesses at an open house or promotional event. They are required to use a digital or scanned photo in their presentation. No summary will be required for this phase, as the presentations speak for themselves.

- ***Phase 6 - Web Page.*** This section requires students to create a web page to promote their businesses. They will use digital or scanned photos, links to another page, links to their e-mail addresses, and graphics/text to support their designs. Again, no summary will be required for this phase, as the web pages speak for themselves.

- ***Phase 7 – Final Phase.*** The last phase of this project requires the students to write cover letters to prospective employers. The letters are presented in a professional format. The students are required to find the names of businesses similar to the businesses they have chosen and the names of human resource managers. In these letters, the students discuss why they want to work for the particular companies, list their talents, and use the business package they create as a portfolio for the prospective employers. They also specify when they will call to schedule interviews.

Each phase of the project is completed after the application exercises. Percentage grades for individual phases are larger than the application exercises since they are culminating events for each application. Grading suggestions for each phase of the project are included at the end.

Results

The results are terrific. Soon the students are thinking of the potential of the program for their own businesses as they work through the application exercises. They make connections from the software capabilities and the needs of the businesses. This made the software instruction more meaningful because the students relate to their needs and interests. Their ability to problem solve increases due to project-based learning activity (Bitner, Wadlington, Austin, Partridge, & Bitner, n.d.).

The creativity and depth of knowledge that the students demonstrate in their projects are truly impressive. The feedback from the students indicates that they really like this project. Examples of prospective businesses that students have created include stores for sporting goods, hair styling, video rental, day care, clothing consignment, charter fishing, animal sitting, veterinarian services, coffee/book, perfume, construction/remodeling, home building, soccer and video imaging services.

Project Example

One student project consisted of a video rental store. Listed below are examples of entries for each phase of the business:

- ***Phase 1 – Word Processing.*** The proposal described the video store operation in detail. The student had several locations for the video store, each requiring 7 to 10 employees with hours of operation 10:00 a.m. until 11:00 p.m. and open 7 days a week.

- ***Phase 2 – Spreadsheet.*** The spreadsheet calculated the payroll of each employee. Formulas were entered to multiply the number of hours worked by the rate of pay. Calculations were then entered to

determine the amount of FICA, federal withholding, state income tax, health insurance deductions, total deductions, and net pay.

- ***Phase 3 – Publishing.*** A flyer was developed to advertise the grand opening of a new location with promotional rates for video rental at the new store.

- ***Phase 4 – Database.*** A customer database maintained the membership data for the video store and the movies currently rented by each member. Queries were used to determine the movies due to be returned by a certain date and also which movies were overdue. A report was created that lists the customer, the movies the customer checked out, and if the movies were overdue. This list was used for employees to call the customer to remind them of the overdue status of the movie.

- ***Phase 5 – Presentation.*** This presentation would run continuously at local mall and grocery stores to advertise the business, its location, hours of operation, the latest movies available, movie costs, promotional items, special discounts, and also advertise for potential employees.

- ***Phase 6 – Web Page Development.*** Web page development consisted of all of the items in the presentation, only in a different format. All of the categories were available as links. Links were also provided for on-line membership application and for a database of movie description and availability. A link to e-mail the video store was also included. Graphics included scanned photos from movie advertisements.

- ***Phase 7 – Cover Letter.*** The cover letter expressed an interest in employment for a management position in a video store. Experiences were included that detailed the student's knowledge of various software applications and references were made to the portfolio that was attached demonstrating expertise in particular areas. A request for an interview was included in the closing paragraph, noting when the student would call to schedule an interview.

Suggestions

Advise students to choose their businesses wisely. Give them an appropriate amount of time to select businesses they wish to pursue. Students who do not choose wisely have a more difficult time as the project progresses. Also, do not let the students change their business once they have started the project.

Some students may become quite involved with their businesses and the project becomes very time consuming. They create very lengthy data files, multiple tables, and numerous graphs, so it is recommended that time and/or size limits to files be set.

Project-based learning could easily be implemented in any curriculum. It adds to the students' interest of the topic. When the students makes their choice for the project, they take ownership of the assignment, and it is more relevant and meaningful to them. They are much more actively involved because it has been their choice.

References

Bitner, N., Wadlington, E., Austin, S., Partridge, E., Bitner, J. (n.d.). Learning and Leading with Technology, 26(6) 7.

Wolk, S. (1994, November). Project based learning: Pursuits with a purpose, Educational Leadership, 52(3), 42.

Possible Grading Summary

Business – Proposal

_____/ 12 Business
_____/ 12 Location
_____/ 12 Purpose
_____/ 12 Number of employees
_____/ 12 Hours of operation
_____/ 15 Spelling/grammar

Comments:

_____/ 75 Total

Business –Spreadsheet

_____/ 20 Spreadsheet
_____/ 10 Formulas
_____/ 30 Beneficial to business
_____/ 15 Summary – ½ page

Comments:

_____/ 75 Total

Business - Publishing

_____/ 45 Publisher creation
_____/ 15 DesignlLayout
_____/ 10 Spelling/grammar

Comments:

_____/ 70 Total

Business – Database

_____/ 15 Table
_____/ 15 Query
_____/ 15 Report
_____/ 15 Serves a useful purpose
_____/ 15 Summary – ½ page

Comments:

_____/ 75 Total

Business - Presentation

_____ Name

____ / 20 10 slides
____ / 20 Scanned/digital photo
____ / 20 Master slide
____ / 20 Continuously running
____ / 20 Beneficial to business
____ / 10 Design
____ / 5 Printout – 6 per page
____ / 10 Graphics appropriate
____ / 10 Spelling/grammar
____ / 10 ½ page summary

Comments:

____ / 145 Total

Business Web Page

Name _____

_____ / 30 Gen info about your business
_____ / 10 Background
_____ / 10 Scanned/digital photo
_____ / 10 Name on page
_____ / 10 E-mail to ——
_____ / 10 Spelling/grammar
_____ / 10 Three links to URL's
_____ / 10 One link to another page you have created
_____ / 10 Link to your high school
_____ / 10 Overall visual appearance
_____ / 10 Effective web page

_____ / 130 Total

Business - Portfolio Cover Letter

Name _____

_____ / 15 Format
_____ / 15 Spelling/grammar
_____ / 15 List talent
_____ / 15 Examples
_____ / 10 Closure

_____ / 70 Total

Student Passages: Moving from Ineffective Groups to High Performance Teams

Annette C. Easton and Marie E. Flatley

Area Needing Improvement

Most business students are assigned to a variety of group projects throughout their school years. Typically these groups range in size from three to five members, with the time frame of the project lasting a few weeks. Instructors often use these group projects in an attempt to allow students to experience the way work is accomplished in the business world. They hope these groups of individual students will actually be able to work more as high performance teams than as a collection of individuals. They rely on students having learned previously the basic principles of group work as well as communication strategies and project management.

Too frequently, though, these students fail to integrate these principles into their actual work. Some are frozen by the reality of needing to get something done, so they fall back on familiar work styles. They often divide up the tasks among individual members, and thus avoid working as a group. Sometimes when group problems arise, leaders choose to finish the work on their own rather than develop effective ways to deal with them. All of this results in students failing to experience the realism of a complex business situation and not learning about what it takes to really become a high performance team. Thus, they are not really prepared to integrate these skills into their careers.

Many factors contribute to this situation. First, students need to be assigned projects of sufficient complexity that they must really work as a team to succeed. Many times the project workload is only slightly more difficult than that which could reasonably be asked from an individual student. Second, while the students have been taught basic principles of group work, in most cases it has been in the abstract. They need guidance in applying these techniques. Third, instructors need to be willing to guide the students through task and team struggles. In essence, the instructor needs to be the mama bird by pushing the baby out of the nest and watching the struggle as the baby learns the strength of its wings. Too often instructors permit students to give up too quickly because it is easier to just give them the answer than guide them through the process of discovering it themselves.

Suggested Idea

Based on an integration of ideas from problem-based learning, collaborative learning and cooperative learning, a project structure has been developed that provides students the opportunity to experience a more realistic team-based project environment. The students work in cross-functional teams on one large class project instead of on many smaller projects with teams of three to five members. The instructor works as a coach to guide or support the students. The students are required to plan, organize, and execute the project. The project task is such that the work needs to be subdivided. Some teams work early in the project life cycle while some work later. Work is passed from one team to the next. Ultimately, the entire class is responsible for making sure that all of the pieces come together. This project structure provides a situation where the work is sufficiently complex to require a team effort. The students, by necessity, must learn to communicate effectively, manage conflict, and become resourceful learners.

Procedures

During the first few weeks of the semester, in addition to the course specific content, material on communication strategies, project management and teamwork is reviewed. To reemphasize and provide additional context, supplementary material about these topics is also presented. A few references to this supplementary material are provided at the end.

When the project is introduced about one month into the semester, the task focus as well as the team focus is discussed. Students understand that they will be responsible for managing the project under guidance from the instructor.

The class brainstorms to identify the different functional teams that will be necessary to complete the project. For a systems development project, these teams typically include a database team, a coding team, an interface design team, etc. The instructor assigns students to different teams based on both their current skills[1] and their desired team assignment, ensuring that each team has some members with skills needed for that function. Additionally, depending on class size and task complexity, one or two students are assigned the task of project coordinator/manager.

When work begins on the project, each functional team brainstorms a list of work to be accomplished. The project coordinator with the instructor reviews this list and develops a master schedule. Each student must keep a journal or log of activity on the project. While no specific requirements are made about how to run the project, the instructor provides suggestions about team briefings, problems to anticipate, and tips for completing the project.

Class lectures parallel the task work of the project, allowing the teams to apply the skills to the team project. Class time is also given to project teams to deliver briefings. This allows the entire team both to learn about developments and to share ideas. These briefings also serve to increase the commitment of the team members to the project.

At the end of the project, each student is required to write a project assessment paper. In this paper they detail what they were asked to do, what they actually did, why deviations may have occurred, what they learned from the project, and any recommendations they would have about future projects. After the papers have been read, the instructor hosts a class discussion where the information is shared with the class. The diversity of opinions about the project and the learning that occurs helps students understand what degrades and what improves high performance teams.

Results

Most often the students will struggle with the project. For many it is the first time they have been allowed to make the critical decisions about a project instead of following the step-by-step directions of an instructor's assignment. They typically don't do the best job in applying project management techniques and they are usually forced to deal with difficult team members. However, most are able to look back and see what they really learned. Even though they may not have been completely successful in accomplishing their tasks, usually they are completely successful in learning what it really takes to have a high-performance team. They can truly appreciate the value of project management, communication, and team skills. They are prepared to be effective and productive employees.

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[1]Students complete a skills inventory sheet that assesses project management, communication, and team skills as well as skills specific to the project task.

From an instructor's perspective, this may be a risky approach. Instructors must be willing to give up the control of a tightly structured course and project. They must be comfortable in letting students struggle and falter. They also must be able to manage student expectations. Students often think they know all about teamwork, communication and project management. They want to learn the newest skill or technique related to the class content. Once the project has begun, students quickly realize the naiveté of their initial perceptions. Often instructors must learn how to act as a coach instead of a lecturer. However, the instructor benefits are high. The increase in student participation, motivation, learning and understanding will bring a new dimension to class discussions.

Suggestions

This technique can be integrated into most group projects across the business curriculum. It has been used successfully for several semesters in the Information Systems Design course and also the Database Management course. Some of the projects have included the analysis, design and development of an enrollment management program for preschools, an e-commerce enabled web site for a hair accessories business, and a reservation and checkout system for a university media center. Marketing classes could use this approach in the development of a marketing plan for an organization, while management classes could integrate this approach into projects where students are asked to develop strategic plans for an organization. The instructor simply must determine a project of sufficient complexity and think about the logical breakdown of the work into functional task teams.

The continued need for students to learn teamwork, develop skills of inquiry, and improve their project management and communication skills is certain. The methods used by many to teach these skills are in need of improvement. By being willing to take the risks inherent in a loosely structured project like this, instructors will succeed in helping students make successful passages to becoming effective members of high performance teams.

References

Katzenbach, J. R. & Smith, D. K. (1993). The Wisdom of Teams: Creating the High-Performance Organization. Boston, MA: Harvard Business School Press.

Rettig, M. (1990, October). Software teams. Communications of the ACM, 33*(10)*,23- 27.

Wetherbe, J. C. & Wetherbe, M. B. (1993). So, What's Your Point? A Practical Guide to Learning and Applying Effective Techniques for Interpersonal Communication. Minneapolis, MN: Mead Publishing.

Students Demonstrate English and Keyboarding Skills

Gail Garton

Area Needing Improvement

Lehman (1991) stresses that communication skills must be reinforced as students are introduced to technology. Students have differing levels of English proficiency. Since no pretest is given prior to enrolling in technology classes, during the first week it is important to assess students' English proficiency. The results allow the instructor to tailor instructional activities that will reinforce the English skills deemed to be lacking.

Suggested Idea

Have students write a personal business letter sharing any information about themselves that they are comfortable sharing. They use a personal business letter as the format to gain experience with composing a letter.

Procedures

Students are given the assignment to key a letter in the personal business letter format. An example of the format is provided to the students. Because letters are a standard medium for communication on the job, students need practice composing letters (Koffel, 1994). This exercise has them immediately begin using a standard letter format to communicate information.

Students are given three days to complete the assignment outside of the classroom to avoid others reading their letters.

Results

The results are twofold. The first result is that the instructor has the information to make an assessment as to which students need extra help with English skills and which overall skills need to be reviewed. The second result is that the instructor gets a better understanding of each student. Students provide information about themselves that they might never share otherwise. The students enjoy the opportunity to put into a letter some details about their lives and often ask for a return letter.

Suggestion

Give ample time for students to consider what information to share and to key at home or in an alternative location that allows more privacy than in class where other class members might see and read.

References

Koffel, L. (1994). Teaching Workplace Skills. Houston: Gulf Publishing Company.

Lehman, C. (1991, Spring). Computer-based communication skills for the 1990's: Content and strategies. Instructional Strategies: An Applied Research Series, 7(2).

Students Demonstrate Computer Skills

Heidi Perreault

Area Needing Improvement

Students often create computer-based documents and projects following the "cookbook" approach. They enter what the textbook instructs them to enter without giving much thought to the reason for the entry. There is little likelihood that the student will be able to transfer the computer skill to other situations (Schmidt & Kirby, 1995).

Suggested Idea

Students complete a set of related computer assignments. Instead of printing and turning in the documents, the students demonstrate key activities at the computer. The instructor uses a checklist and views the screen of each student as the student completes a list of changes or additions to the assignments. The student answers questions regarding the documents while making the modifications.

Procedures

Assignments were given and the rule was to save them in a folder on their disk with an assigned name. During a class when the students were being given time to complete other computer-related work in class, half the class was asked to open the folder containing the most recent assignments and to have the documents ready for review. Typically, only half a class can be completed during a 30-minute hands-on exercise.

The student continues to work on the current activities until it is his turn to be reviewed. At that time, he switches from the current activity to the assignments to be checked. Using a checklist, the documents are first verified to be sure they are complete and then the student is asked to perform specific actions on the documents. (For example if the document is a spreadsheet and the purpose of the assignment is to enter a formula, the student would be asked to modify the formula.)

Students also are asked some basic questions regarding the document. They need to be able to explain why a certain action was important. (Example: Why did they use the cell address instead of the dollar value in the cell when creating the formula?)

The students are allowed to take a pass if all the documents are not complete or if they are not ready to answer the questions. The pass is a way to allow some flexibility for the student and to prevent wasting time looking at incomplete work or hearing excuses as to why the assignment is not ready. No penalty is associated with a pass.

Once the students are used to the technique, a student's work can easily be reviewed in 2 to 3 minutes. As the instructor nears a computer station, the student opens all of the documents in the folder. The students like the one-on-one time even if it is short. Students receive positive feedback on what they accomplish and are asked to redo work that is not completed to standards. They can submit the revised document electronically.

Results

The overall result was better test grades. The higher test grades can possibly be attributed to both the immediate feedback and to the students taking the assignments more seriously.

With the on-screen grading, the feedback was immediate. If the student was unsure of how to accomplish a task, immediate assistance was provided. After visiting with a few students, it was obvious which material was clear and which needed another assignment. The students also were more confident of their skills and appreciated the one-on-one help. They particularly liked being able to show when they had found a shortcut or a "better way" to accomplish the task than the method shown in the textbook.

The students took more responsibility for their assignments. Previously, when returning graded paper copies, it was noted that students recorded the grade and threw away the copy without reading the comments. With the on-screen grading, the students were telling where they needed more work and demonstrating competency through actions and oral responses.

Suggestions

Incorporate the pass for work not complete. The pass prevented having to look at half completed work and hearing excuses. Reviewing incomplete or sloppy work defeats the purpose as no real feedback can be provided. A limit on the number of passes allowed per semester is needed.

The on-screen grading can be used in any course with computer-created documents. This example was used in a computer applications course.

Reference

Schmidt, B. J.& Kirby, M. Technology and the development of critical thinking skills." Technology in the Classroom. Yearbook No. 33 (pp.32-39) Reston, VA: National Business Education Association.

Teaching Problem-Solving in Computer Applications Courses

Charles M. Ray

Area Needing Improvement

Instructional methods, corporate training, and text materials used in computer applications courses tend to provide very literal, step-by-step procedures for accomplishing tasks. This works quite well for introduction of concepts and immediate reinforcement of procedures. However, the ultimate goal of computer instruction should be preparing the learners to use the software as a tool to make decisions and solve problems. Whether the learner's next application of the task occurs in a work environment or in further coursework, retention of major concepts and procedures should be sufficient for using the software in situations not "practiced" in class assignments.

Even though some text materials include steps requiring use of online help facilities and independent thinking, they tend to hold the learner's hand through much of the process or require the duplication of illustrated outcomes (a formatted report, spreadsheet, database table, or presentation). Learners may be able to successfully complete assignments, but within a few weeks after completion of the unit or course, they may be unable to solve a business problem using the software as a tool. Because these conditions appear to be more prevalent with spreadsheet and database instructional materials, these suggestions will use those two applications as examples.

Suggested Idea

Instructing students so they can transfer what is learned in computer applications to their situation involves the following progressive "inputs".

1. Exercises requiring total student construction—not simple manipulation of publisher-provided files.

2. Preparation for problem-solving assignments through class discussion and practice problems.

3. Exercises requiring general descriptions of desired outcomes, but not step-by-step instructions about how to produce that outcome.

4. Totally unstructured problems to be solved using the software—either through learner-developed files or large, realistic instructor-supplied files.

Procedure for Accomplishing Learning

The use of "inputs" include the following procedures:

1. Use typical exercises supplied by instructional materials for introduction of software capabilities, but move quickly to instructor-designed materials of the following types:
   a. Exercises requiring production "from scratch" rather than manipulating prepared files supplied by the instructor or the publisher. If learners follow some predesigned text materials, they may leave a course knowing nothing about solving a problem by starting with a blank spreadsheet or database.

   b. Exercises describing in general terms the nature of a spreadsheet, database, or database component to be produced. Avoid detailed instructions, such as "Key the title 'ABC Company Wage and Salary Projections' in Cell A1."

2. Intersperse the software instruction with discussions and activities about problem solving in general. Supply exercises that require critical analyses of situations and requests from superiors as practice. Ask students to recommend solutions, identify how the software could be used to simplify the solution, and defend their recommendations. Practical applications such as loan amortization and future value of investments in retirement plans are sufficient for such exercises using a spreadsheet. However, instead of giving specific directions about the spreadsheet's content and appearance, present an unstructured request for a report. Ask learners to produce such a report using the spreadsheet as a tool.

Use "industrial grade" problems and solutions. Simple worksheets and 10-record databases are quite sufficient for basic instructions, but eventually students should be exposed to large collections of information for processing and complex situations requiring software capabilities not specifically covered in the text or classroom instruction. Spreadsheets with hundreds of rows and dozens of columns and databases with thousands of records are more realistic than one-screen spreadsheets and two-table databases. Free software for generating large databases for instructional purposes can be obtained by contacting cchen@bsu.edu.
[Editor's Note: See "A Software Tool to Generate Realistic Business Data for Teaching" at the beginning of this publication.]

The following examples illustrate how these procedures can be implemented in spreadsheet and database problems.

Spreadsheets. The Human Resources Manager at ABC Company wants a spreadsheet that can be used to project the future value of company-matched employee contributions to a 401k retirement plan. Preferably, the spreadsheet will be designed so that basic input data can be keyed into a few cells and the spreadsheet will calculate the value of the investment at specified future times, for example, 5-, 10-, and 15-year intervals.

The preparation should include a brief discussion of 401k plans, employer contributions, employee contributions, reasonable rates of return, and the future value spreadsheet function. Students might be asked to investigate spreadsheet protection if that topic has not been covered.

Databases. Before the manager recommends that Employee X, a sales representative, be dismissed for poor performance, he wants your opinion about whether there is sufficient evidence in the database to justify such action.

The preparation should include providing a large database with multiple tables covering major facets of sales efforts: dates and times of representatives visits to clients, promotional telephone calls, and potential client calls; customer order data; complaint information; returns, etc. Prior to presenting the problem, learners would be exposed to the database and its various tables.

The database should be large enough that students cannot "hunt" for the records and solve the problem. They should know how to do queries and produce reports containing subtotals and calculations. However, solving the problem should require them to think about what information is there and how they can pull it from the database to provide needed information.

Team efforts at solving the problems may be better than individual assignments. Students working in teams may be able to pool their knowledge and reach conclusions more quickly.

Results

Exercises such as those suggested here are attempts to circumvent the criticism that students can't think, that they forget course content immediately after completion of the course, or that they are unable to apply software skills in advanced courses where such knowledge is expected. They quickly humble the student who thinks he or she knows all there is to know about a particular software package. Personal experience suggests that problems requiring reasonable amounts of agonizing and searching by students tend to be realistic and representative of life on the job. Given the opportunity to discuss their frustrations, share their success stories, and ask for assistance after reasonable effort, such experiences are not demoralizing.

Teams: A Colorful Match

Melinda McCannon and Tena B. Crews

Area Needing Improvement

Teams, defined as "a small number of people with complementary skills who are equally committed to a common purpose, goals, and working approach for which they hold themselves mutually accountable," (Weiss, 1998) are an important part of the learning and instructional process. Educators are encouraged to team-teach across disciplines, incorporate team-building activities into their classrooms, and help students understand how to work within groups. Teamwork is not a new concept as it has been valued throughout history (Warwick, 1997). However, in today's global society, the ability to work in teams must not be considered a superfluous skill but an essential skill.

A fundamental part in the team building process is to get to know the team members. However, the first step is to understand how each individual will best contribute to the team. To accomplish both of these goals, one could use the Myers-Briggs Type Indicator. "The Myers Briggs Type Indicator is a tool designed to help each of us gain an understanding of why we prefer to do things the way we do and why others prefer to do things the way they do" (Lyman & Richter, 1995). However, the Myers-Briggs analysis can be costly for large groups of students.

Suggested Idea

If students understand their strengths as a team member and the strengths of the other team members, a more cohesive team will be formed. Therefore, less time will be spent on negotiating duties and more time can be spent on completing the project. Many instructors prefer to assign teams. As instructors assign members to a team, they are also modeling how teams are formed in many organizations. Normally, it is unlikely that individuals get to choose who will be a part of the team. Teams are assigned by the supervisor or team leader. However, as class sizes increase and class projects become more prevalent, teams may need to be formed as quickly as possible. Due to this urgency, teachers may not have time to adequately assess each student's strengths as a team member; therefore, the most competent teams may not be formed.

Many students want to choose their own team members preferring to work with their friends. By choosing their friends, conflict may not be as prevalent as a pre-selected team. However, when team members are too familiar with each other and have a great desire to get along and complete the task quickly, creativity suffers. The lack of creativity and urgency for completion may result in a mediocre project.

The colorful match project is an entertaining and inexpensive alternative method of assigning individuals to a team. Through this project, the teams are not assigned by the teacher nor are they chosen by the students. The teams are formed by individual strengths, thus resulting in properly designed teams. This activity can be used in any course at any grade level in which teams are utilized.

Teacher Procedures

Teachers will need to cut out triangles (blue, yellow, green, red) and write the valued trait of the corresponding color on each triangle (see Figure 1). Teachers must then place a blue, yellow, green, and red triangle on each student's desk. The teacher will discuss the color chart information written on each triangle.

Figure 1 Color Chart **(Synergistic Living Inc., 1997)**

Color	Valued Trait
Yellow	orderly and prefers schedules with step-by-step procedures
Green	logical and has a vision for the future
Blue	harmonious and focused on helping others
Red	flexible to changes in direction and adventure seeking

Note: Wording may be changed for use at appropriate grade level

Student Procedures

Students will rank each colored triangle with the color chart information that best describes them as a team member. As the students rank the triangles from one to four, they should write a one on the triangle that best describes them, a two for their second best match, a three for their third choice, and a four for the triangle that least describes them as a team member.

Taking their number one triangles, the students must then find three other students with number one triangles of the three other colors. For example, if Tom's number one triangle is yellow, then he must find team members with a number one blue, a number one red, and a number one green triangle. These students will put the four triangles together creating a square representing their team: the colorful match.

If there are not enough different colors to form all number one squares, number two colored squares may be used in conjunction with number one squares. There may be squares that have all number two triangles. The goal is to make squares that have all four colors represented with the priority being: (1) squares made up of all one's, (2) squares made up of all one's and two's, or (3) squares made up of all two's.

Suggestions

Several studies involving teams have been completed. One such study by Neuman, Wagner, and Christiansen (1999) investigated the relationship between work team effectiveness and personality aspects. They found that certain personality traits were positively related to team performance. This is emphasized in the colorful match activity. Warwick (1997) also reported "teams need to be a combination of people with different personality characteristics, knowledge, and skills with some recognition that there are benefits to working together."

Weiss (1998) reported that Robert Lynch, Vice President of the Miller Consulting Group, stated that diversity in groups includes analytical and action-oriented team members. This blending of values and styles results in a good team and good decisions. Lyman & Richter (1995) stated, "the most efficient teams have a good balance of personality types." It is important that team members understand their personality as well as the other team members' personalities.

This understanding will allow the teams to work together by taking turns to complete their tasks. "If a team is lacking some of the different personality types, then they will need to be extra cautious in certain areas and activities because all members will find them uncomfortable and tend to avoid that area of effort" (Lyman & Richter, 1995). If areas are avoided, an incomplete or mediocre project will be submitted.

Color is one way to decipher personality styles. Four colors described by Williamson (1985) were those personality types who were: (a) blue – group-oriented and helpers, (b) red – make decisions quickly and handle conflict well, and (c) green – logical and visionaries, and (d) yellow – orderly and scheduled with step-by-step procedures. Williamson's colors and personality types correspond well to those used in the colorful match activity: Synergistic Living, Inc. (1997): (a) blue – is harmonious and focused on helping others, (b) red – is flexible to changes in direction and adventure seeking, (c) green – is logical and has a vision for the future, and (d) yellow – is orderly and prefers schedules with step-by-step procedures.

Including diverse team members is important to an effective project. One way to achieve this diversity is through the use of colors and personality traits. The colorful match project is a fun and useful activity that will achieve that goal.

References

Lyman, D. & Richter, K. (1995). QFD and personality type: The key to team energy and effectiveness. Industrial Engineering, 27(2), 57-61.

Neuman, G., Wagner, S. & Christiansen, N. (1999). The relationship between work-team personality composition and the job performance of teams. Group and Organizational Management, 24(1), 28-45.

Synergistic Living, Inc. (1997). Assessment with Directionality™. Mandeville, LA.

Warwick, D. (1997). What history can teach us about team-building. People Management, 3(25), 43.

Weiss, W. H. (1998). Teams and teamwork. Supervision, 59(7), 9-11.

Williamson, B. (1985). Are you a blue, red, or green type? Manage, 37(4), 5, 26, 30.

Using Assignment Sheets to Keep Students Busy

Kathy Burchfield

Area Needing Improvement

Students in keyboarding come with all varieties of learning styles and levels of skill. The diverse classroom demands creative activities that appeal to the varied learning styles and interests of students (McEwen & McEwen, 1996). Originally assignments were given and the class moved step by step together. This caused frustration for those students who would complete a task quicker or slower than others.

Suggested Idea

Provide students with assignment sheets at the beginning of each class. Each assignment sheet includes an objective for the lesson as well as instructions and page numbers for each activity. Those students completing one activity sooner than others may advance to the next activity instead of waiting for other students.

Procedures

Students pick up an assignment sheet as soon as they enter the classroom for keyboarding. The warm-up activity is listed first, so students may begin immediately while the teacher completes classroom management activities. The assignment sheets should be designed from easy to difficult within each topic to challenge all students.

After the administrative activities are completed, the teacher then asks for the attention of the entire class to review the objective for the lesson, to give general instructions, and demonstrate new techniques that will be needed in order to complete the assignment. If students will be practicing a new technique, the teacher should use this time to explain and demonstrate the activity.

Students are encouraged to ask questions as needed. The assignment sheet approach allows the teacher to spend more time assisting students with specific tasks.

Results

Students have commented that using assignment sheets helps them feel more in control of their own work. Those students who are faster than others may move to the next step without waiting for other students, and consequently feel less frustrated. In addition, assignment sheets keep students involved in productive activities throughout the class period. The assignment sheets are also good to have in case of a teacher absence. The assignment sheets are routine to the students, so the substitute simply hands out the assignment sheets and students should know exactly what the regular classroom teacher has planned.

Using the assignment sheets saves the teacher from repeating instructions several times and allows the teacher to help students as needed. When students are ready to move to the next activity, they may simply refer to the assignment sheet to find page number, activity number, etc.

Suggestions

Assignment sheets are used in the keyboarding classes **after** the introduction of keys. The entire class moves from one step to the next in unison while introducing keys.

The assignment sheets require the teacher to be more specific on items that need special attention of the student. If students do not print all of their work, be specific on the instructions as to which items should be printed.

There is a learning curve involved for the students to go from the unified lessons to assignment sheets, but once they are used to the idea most really like it.

Reference

McEwen, B. C. & McEwen, T. (1996). Diversity in the classroom. Classroom Strategies: The Methodology of Business Education. Yearbook No. 34 (pp. 74-83). Reston, VA: National Business Education Association.

Using Intranets for Teamwork

Marie E. Flatley and Annette C. Easton

Area Needing Improvement

Today's businesses are looking for employees with both technical skills and soft skills. One of the soft skills highly sought after is the ability to work effectively in teams, a skill recruiters try to assess and educators attempt to develop. Recruiters use behavioral questions in interviews to assess these soft skills, and educators assign students to teams on projects to help students develop these skills.

However, due to the artificial nature of the projects and time constraints of semesters, students run into problems and conflicts that deter them from developing these skills. One of these problems is the difficulty students have in meeting with their teams due to conflicts in class times, work schedules, and other personal commitments. They often solve this dilemma by meeting a few times for basic planning, splitting up the project into individual tasks. This often results in the students working only minimally as a team, instead of creating the synergy of effort that highly effective teams develop. Not only does this common solution result in reports and projects pieced together with many voices instead of one coherent team product, this solution also defeats the instructor's attempt to help students develop team skills. Recruiters clearly see that students don't have team skills even though they report working on teams in many courses. Another problem is that while instructors present realistic business problems, they are necessarily limited by the time and tools students use.

Suggested Idea

One way to enable students to overcome conflicts in time schedules and meet or work together effectively is to use a relatively new technological tool—the web-based Intranet application. This tool, an anytime/anywhere tool, allows teams to meet online in a secure, private space with a common set of tools. Most of the free web-based Intranet applications include a calendar, email capabilities, announcement posting, document sharing, link sharing, and contact databases. Some have instant messaging, and all are adding features regularly. A few of these free online tools are listed in Figure 1 at the end. There are also fee-based web Intranets already available with features such as pagers, calendar synchronization, and large online file storage space.

Another form of web-based Intranet application is the online learning site such as Blackboard, WebCT, eCollege and a host of others. These sites have features that allow instructors to set up secure, private places for teams to work together. In addition to the tools offered by the free web-based Intranets, these sites offer tools for both synchronous and asynchronous communication that can immensely enhance the quality of teamwork. Online chat, for example, allows real-time or live exchanges while threaded discussion offers listserv-like asynchronous conversations.

These Intranet applications reduce the time constraint problem that many students experience, enhancing the quantity and quality of their communication. Additionally, they give students tools businesses commonly use, enabling the projects assigned to be conducted more realistically.

Procedures

Setup and use of the web-based Intranets require little to no training to figure out how the tools work. However, giving students an overview walk-through demo that includes typical applications of each of the features enables them to see a few uses of the tool. Additionally, showing them examples of typical Intranets may

stimulate their creativity in using them. Examples of Intranets can be found from companies that sell Intranet-in-a-box products. Some of these are presented on the CD accompanying books on the corporate Intranet (Gonalez, 1998). Also, the Complete Intranet Resource web site, listed in Figure 2 at the end, contains links to some web demos of business Intranets.

All the instructor need to do is assign the teams, require teams to set up an Intranet at one of the web-based sites, and ask them to invite the instructor to become a member of their Intranet. Because setting up the Intranet takes less than ten minutes, it is a task that teams can complete easily in a class. Setting up an Intranet at their first meeting gives them a task they can complete cooperatively and easily, initiating the building of a culture of collaboration. Since this is a new method of communication for most students, we encourage the instructor to require participation via the Intranet since students rarely choose to use an unfamiliar tool.

Results

Using Intranets for teamwork will bring immediate discernable results to both the instructor and the students. One of the most evident results is that quality of the reports and projects will improve. Students spend more time working on the task at hand than working on coordinating meetings. They will find the Intranet helpful in the planning, organizing, and writing tasks. Additionally, eliminating conflicts in meeting schedules removes one of the barriers to building cohesive teams. The threaded discussion/bulletin board tool allows students to post ideas at convenient times, and the chat tools allow them to work together in real time from any place. In fact, if today's students' facility with chat tools can be focused on solving business problems, they may be the ones to enhance its use in business as a productivity tool.

Another important benefit from the use of realistic problems with today's technological tools is that assignments can be designed that are truly realistic.
Instructors can develop or assign projects that require students to query databases, view policies and procedures, check style guides and templates, and a host of other variations that employees might typically use an Intranet for in working together. Students will learn how to use an Intranet appropriately in small concepts such as reducing indiscriminate printing and copying to larger concepts such as unifying geographically dispersed operations.

The Intranet is clearly a technological tool that will help students develop team skills, enabling them to be productive and contributing employees.

Suggestions

In addition to using the Intranet solely for small team tasks, one can be used in a variety of other classroom enhancing ways. One way is to invite distinguished business people and alums to participate in class projects through the use of the Intranet and its tools. Another way is to use its announcements feature to post jobs, web sites, and other educational material. The calendar could be used to show interesting local events such as campus activities and speakers as well as other good media events. Furthermore, it could also be used to conduct periodic opinion polls or surveys of stakeholders, allowing you to keep abreast of the needs of your stakeholders.

The continued use and growth of the Intranet in business is clear. Using it in the classroom to improve learning and build skills employers value makes its use a good choice.

Figure 1

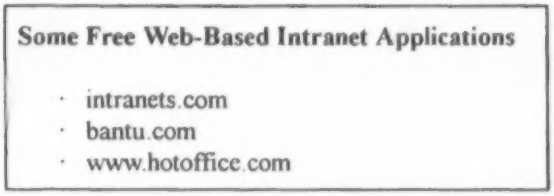


Figure 2

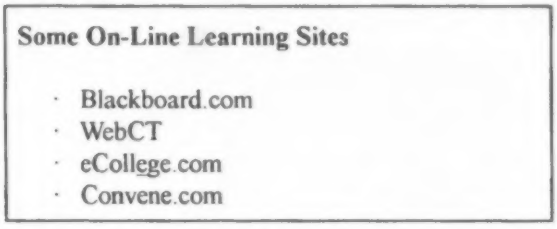
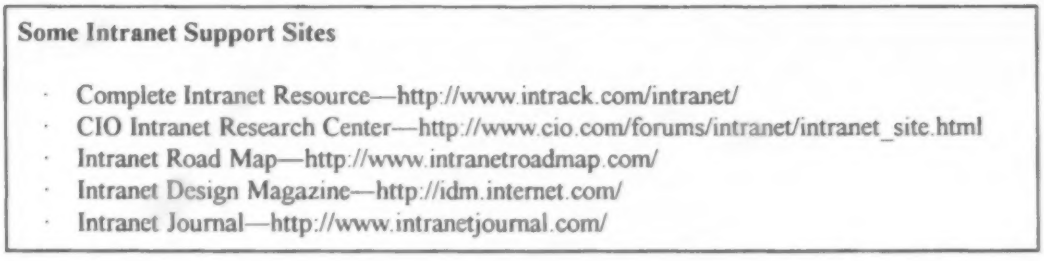


Figure 3


Some Intranet Support Sites
· Complete Intranet Resource—http://www.intrack.com/intranet/
· CIO Intranet Research Center—http://www.cio.com/forums/intranet/intranet_site.html
· Intranet Road Map—http://www.intranetroadmap.com/
· Intranet Design Magazine—http://idm.internet.com/
· Intranet Journal—http://www.intranetjournal.com/

Reference

Gonalez, J. S. (1998). The 21st Century Intranet. Upper Saddle River, NJ: Prentice Hall PTR.

Authors

Johnny Sue Bauer
Business Department
Scott High School.
Taylor Mill, KY 41015

Carol Blaszczynski
California State University
Los Angeles, CA 90032

Dianna Briggs
Department of Management
University of Northern Iowa
Cedar Falls, IA 50614

Kathy Burchfield
Business Department
Marshfield High School
Marshfield, MO 65706

Marilyn Chalupa
Dept. of Business Education and Office Administration
Ball State University
Muncie, IN 47306-0335

Catherine Chen
College of Business
Ball State University
Muncie, IN 47306

Rose Chinn
Business Department
Scott High School
Taylor Mill, KY 41015

Tena Crews
College of Business
State University of West Georgia
Carrollton, GA 30118

Nancy Csapo
Business Information Systems Department
Central Michigan University
Mt. Pleasant, MI 48859

Diane Davis
Information Management Systems
Southern Illinois University
Carbondale, IL 62901

Les Dlabay
Department of Economics and Business
Lake Forest College
Lake Forest, IL 60045

R. Neil Dortch
College of Business and Economics
University of Wisconsin-Whitewater
Whitewater, WI 53150

Annette Easton
College of Business Administration
San Diego State University
San Diego, CA 92182-8234

Marie Flatley
College of Business Administration
San Diego State University
San Diego, CA 92182-8234

Gail Garton
Office Systems Technology
Ozarks Technical Community
Springfield, MO 65801

Tom Haynes
Marketing Department
Illinois State University
Normal, IL 61790-5590

Martin Hebel
Information Management Systems
Southern Illinois University
Carbondale, IL 62901

Rebecca Holcomb
Conway High School
Business Ed. Department
Conway, MO 65632

Burt Kaliski
Business Education Department
New Hampshire College
Manchester, NH 03106-1045

Thelma King
School of Business & Economics
NC A&T State University
Greensboro, NC 27411

Jean Mausehund
BEOS Department
University of Wisconsin-Whitewater
Whitewater, WI 53190

Melinda McCannon
Business and Social Science
Gordon College
Barnesville, GA 30204

Heidi Perreault
CIS Department
SMSU
Springfield, MO 65804

Zane Quible
Oklahoma State University
Stillwater, OK 74074

Charles M. Ray
College of Business
Ball State University
Muncie, IN 47306

Sheila Tucker
Department of Business, Vocational, and Technical Education
East Carolina University
Greenville, NC 27858-4353

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